List of chapters available at tobaccoinaustralia.org.au

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Tobacco use among Aboriginal peoples and Torres Strait Islanders

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8.0 Introductory note

Some of the information in this chapter also appears elsewhere in this publication, but because of specific interest in matters relating to tobacco use among Australia's Aboriginal peoples and Torres Strait Islanders, material on the subject has been collected in one place to aid quick reference. Readers seeking broader discussion should also refer to other chapters.

A note on terminology

It is recognised that the preferred term for Australia's Indigenous peoples is Aboriginal peoples and Torres Strait Islanders, and where practical, this title has been used throughout this chapter. The term Indigenous is also used throughout, generally with the intention of reducing repetitiveness or aiding concision for the reader; where it appears, it refers to both population groups.

A note on data and statistics

The information in this chapter on Aboriginal and Torres Strait Islander health and smoking should be understood in the context of the challenges that exist in the collection, analysis and interpretation of health data on Indigenous peoples. Data quality will be affected by issues such as: the potential under-identification of Aboriginal peoples and Torres Strait Islanders; the lack of data sets from some jurisdictions or regions, meaning that some 'national' data do not actually represent the entire Indigenous population; small numbers of participants; and methodologies that may not suit Indigenous people (or Indigenous people in some regions). Comparison of data sets (whether comparing data sets between Indigenous peoples, or between Indigenous and non-Indigenous peoples) is complicated by different data collection methods, and the differing definitions used (e.g. for definitions of smoking status or age groupings).

In addition, data specifically related to smoking rates among Torres Strait Islanders are only reported separately in Queensland; in other jurisdictions data relating to Aboriginal peoples and Torres Strait Islanders are reported together. While national data sets collect information on the health of Torres Strait Islanders, analyses of this data in relation to smoking are not publicly available.

Recent references


8.1 Aboriginal people and Torres Strait Islanders: social disadvantage, health and smoking—an overview

Two distinct Indigenous populations inhabit Australia: Aboriginal peoples and Torres Strait Islanders. Initially, Aboriginal peoples lived throughout mainland Australia and Tasmania and on many offshore islands, while Torres Strait Islanders inhabited the northernmost peak of the Australian mainland and the islands of the Torres Strait scattered between Cape York Peninsula and Papua New Guinea.\(^1\) Both groups are now less clearly defined by geography; many Torres Strait Islanders have moved to mainland Australia for economic reasons,\(^1\) and the Torres Strait region is now home to a substantial population of individuals of both Torres Strait Islander and Aboriginal origin.\(^2\) There is also enormous diversity among different Aboriginal and Torres Strait Islander communities across the country—diversity in culture, language, and the ways in which these communities experienced colonisation.\(^1\) The experiences of colonisation have shaped the ongoing socio-economic disadvantage, poorer health status, and, to some extent, the patterns of tobacco use within these communities. While native tobaccos were used in many Aboriginal and Torres Strait Islander communities prior to colonisation, these have largely been replaced by commercially available tobacco and cigarettes, and tobacco production and consumption practices that were common pre-contact have been lost in most parts of Australia (see Section 8.2).

In 2014, there were about 713,600 Aboriginal and Torres Strait Islander people in Australia, making up 3.0% of the total population.\(^3\) In 2011, 63,700 people identified as being of Torres Strait Islander origin, accounting for about 10% of the Indigenous population.\(^3\) The majority (79%) of Aboriginal peoples and Torres Strait Islanders live in non-remote areas, although proportionately more Indigenous than non-Indigenous people live in remote areas; in 2011, 45% of all people living in very remote areas and 16% of people living in remote areas were Indigenous. More than half of all Indigenous people reside in New South Wales and Queensland combined (32% and 29% respectively). The Northern Territory is home to 10% of the Indigenous population, but has the highest proportion of residents of Aboriginal and Torres Strait Island origin (30%). In all other states and territories, the combined Indigenous population comprises 5% or less of the total resident population.\(^3\)

From a population perspective and according to a broad range of social and economic indicators, Aboriginal peoples and Torres Strait Islanders are by far the most disadvantaged social group in the Australian population. The ratio of Indigenous to non-Indigenous average income is about 0.7.\(^4\) Indigenous Australians are more likely to occupy overcrowded or otherwise substandard housing, to be unemployed, to attain lower levels of formal education, and to have poorer access to facilities and services than other Australians.\(^3,5\) Members of these communities are also more likely to be exposed to violence, to come into contact with the criminal justice system as victims or offenders, and to be over-represented in the prison system.\(^3,5\) In 2014, 27% of the total adult prisoner population were Indigenous.\(^3\) Contributing to and compounding these adverse outcomes are the ongoing traumas of dispossession, cultural dislocation, racism, and separation of families experienced by many individuals and communities.\(^1,6,7\)

Aboriginal peoples and Torres Strait Islanders also have poorer health outcomes than the rest of the Australian population.\(^8,9\) Much of the burden of ill-health is attributable to chronic diseases, including diabetes, and heart and respiratory conditions. For the period 2010–12, life expectancy at birth for members of Aboriginal and Torres Strait Islander communities was estimated to be 69.1 years for males and 73.7 years for females, compared to 79.7 years for males and 83.1 years for females for non-Indigenous Australians.\(^3\) This pattern of ill-health is not unique to Australia’s Indigenous peoples. Indigenous populations in New Zealand, the United States, and Canada have also experienced significantly higher mortality rates than the general populations. However, the reductions in health inequality seen in these countries
since the 1970s are not apparent in Australia.\textsuperscript{10} Between 2005–2007 and 2010–2012, there has only been a small decline in the life expectancy gap between Indigenous and non-Indigenous Australians of 0.8 years for men and 0.1 years for women.\textsuperscript{3}

The poorer health outcomes for Aboriginal peoples and Torres Strait Islanders are partly attributable to the high rates of tobacco use in these communities. Smoking accounts for 20% of Indigenous deaths and 12.1% of the burden of disease—more than any other risk factor.\textsuperscript{11} Tobacco is a causal, contributing, or complicating factor in many of the diseases that contribute most to Indigenous mortality and morbidity, including circulatory diseases, cancer, respiratory diseases, diabetes and pregnancy-related conditions (see Section 8.7). Smoking also has an economic and social impact on Aboriginal and Torres Strait Islander communities (see Section 8.8).

In 2014–15, 39% of the combined Aboriginal and Torres Strait Islander population aged 15 and over were daily smokers, although there is considerable variation in tobacco use rates by location, age group, and gender (see Section 8.3). After adjusting for differences in age structure, Indigenous people were almost three times more likely than non-Indigenous people to be daily smokers.\textsuperscript{12} Encouragingly, there has been a significant decline in Indigenous smoking rates since the early 2000s; however, the gap in smoking rates between Indigenous and non-Indigenous Australians has remained stable.\textsuperscript{3}

Individuals and organisations across multiple sectors and from around the country have been working to reduce smoking rates in Aboriginal and Torres Strait Islander communities for the past 20 years or more. Their efforts have been hampered by poor and unsustainable funding, and by the complex challenges facing the health system in delivering healthcare to Indigenous communities more generally. These challenges include: the capacities of health services and workers; inappropriate development or targeting of programs and resources; insufficient involvement of Indigenous communities; and the lack of strategic coordinated action (see Section 8.10). In addition, interrelated socio-economic factors (such as income, employment, education, and housing), as well as other social factors (such as incarceration, removal from family, and racism) are important determinants of tobacco use in Aboriginal and Torres Strait Islander communities, (see Section 8.3) and can hinder the success of cessation interventions. Stress associated with poor health and socio-economic conditions, as well as from family and community relationships, work expectations, or from racism and marginalisation, contributes to maintaining high smoking rates and relapse (see Sections 8.6 and 8.9).

However, socio-economic factors alone are not sufficient to drive high rates of smoking in Indigenous communities; there are also unique social and cultural factors at play (see Sections 8.6, 8.9 and 8.10). Many people living in Aboriginal and Torres Strait Islander communities are exposed to smoking behaviour in some way; this reinforces the behaviour for smokers and encourages smoking uptake among non-smokers (particularly children). The normalisation of tobacco use is reinforced by the communal nature of smoking, and the social obligations to exchange and share tobacco. Smoking is, therefore, a means of reinforcing social relationships and maintaining social cohesion. In this cultural context, extended families can influence the uptake and maintenance of smoking, as well as being influential in smoking cessation.

Although many individuals and organisations have been implementing tobacco action activities, most have not been evaluated due to a lack of funds or expertise, and the small scale of the activities. Evidence as to what works in tobacco action in Aboriginal and Torres Strait Islander communities is, therefore, limited. Tobacco action programs in these communities are currently designed based largely on what is known about the efficacy of tobacco-control activities in the general Australian community. It is clear, however, that Indigenous tobacco action programs must also incorporate approaches that take into account the socio-economic realities of peoples’ lives and the unique social and cultural contexts, as well as considering how to overcome challenges within the healthcare delivery system (see Section 8.10). Over recent years, there has been a significant commitment to a strategic approach to Indigenous tobacco control with accompanying funding, and over the coming years more evidence of best practice in Indigenous tobacco action will become available as new programs are implemented and evaluated.

Comprehensive, multi-component and community-based tobacco action programs are thought to be the most effective, and many such programs are being developed and implemented in Aboriginal and Torres Strait Islander communities across Australia (see Section 8.10). These programs include a mix of individual-, family-, and community-directed activities to ensure maximum coverage and benefit to smokers and non-smokers. Many programs are also being implemented that include components directed towards specific important target groups: young people, pregnant women, Aboriginal health workers, and prison inmates.

Addressing Indigenous inequalities in smoking and health is a national priority at both the national and state/territory levels. The Council of Australian Governments has committed to ‘closing the gap’ in Indigenous health outcomes, and has an ambitious target to reduce smoking rates. Each jurisdiction has developed implementation plans that are closely related to the strategies and targets articulated in their tobacco strategies or action plans (see Section 8.13).

References


8.2 History of tobacco use among Aboriginal peoples and Torres Strait Islanders

This section draws substantially on a range of secondary articles and reviews,1–11 which together provide an extensive reference list of primary resources, including accounts of tobacco use provided by Indigenous peoples, early European settlers and anthropologists. Those pursuing further information are referred to these publications in the first instance.

Australian natural flora includes several plants containing nicotine, some of which have traditionally been harvested, prepared, traded and chewed by Indigenous peoples across much of Australia. The most potent of these is 'pituri,' made from leaves of the shrub Duboisia hopwoodii, which has a nicotine content of up to 8%,6 much greater than that found in manufactured cigarettes.5,6 Although Duboisia hopwoodii naturally occurs over much of southern and western Australia, most pituri was prepared in south-western Queensland, and from there distributed almost as far north as the Gulf of Carpentaria, south to Lake Eyre in South Australia, east to the mid-region of Queensland, and west to the area where Alice Springs is now located, an area covering more than half a million square kilometres.4,5 It is also believed that a second centre for pituri processing was located somewhere in Western Australia, but little is known of it.4 It remains unclear exactly why pituri production was such a localised behaviour, when it was considered such a valuable commodity and Duboisia hopwoodii is not an especially rare plant. One theory is that remote end-users of the processed product may not have recognised the association between pituri and the shrub, but it is now considered more likely that the leaves from plants growing in the south-west of Queensland (and possibly those from the Western Australia centre as well) were favoured because they contained nicotine in a less immediately toxic form.4,5

Other plants traditionally used for chewing include the nicotine-containing species Nicotania gosssei, Nicotania suaveolens, Nicotania excelsior and Nicotania ingulba.6 These 'bush tobaccos' were chewed by men, women and children, and, like pituri, were widely traded over long distances.1,8 Bush tobaccos are still used and traded in some regions3–6 (see Section 8.5.3). Over time, terminology has altered, and in some regions bush tobaccos are now collectively referred to as pituri.1,3,5,6,8

Pituri was prepared by drying selected leaf and stems of the Duboisia hopwoodii, often in sand ovens,5 then packing the product into specially woven bags, ready for trading.4 Pituri was produced and traded in such considerable volumes that it is probable that those who harvested it also used techniques to maximise cropping.4 Early reports show that knowledge regarding processing had a sacred ritual significance and was vested in specific groups or clans, and that usage was probably restricted to older males.4,5 Prior to chewing, pituri4 (and other bush tobaccos, such as Nicotania spp.)6,1 would be mixed with alkaline wood ash, which facilitated the release of nicotine from the leaf and enhanced its absorption through the lining of the mouth. This process has been likened to the combining of betel with lime prior to chewing,4 as practised throughout much of the Asian subcontinent.12

The mood-enhancing effects of nicotine lent the offering of pituri significance as an overture of friendship, and in some ceremonies the sharing of pituri both symbolised and facilitated social bonding.4,6 It also fulfilled the practical purposes of suppressing appetite, providing sustenance on long journeys,4,7 and, in larger quantities, serving as a painkiller.4,6 Pituri was the most highly valued commodity in circulation; it was so important that it has been described as the 'gold standard'6 of Indigenous trading. Although it is likely that at least a proportion of users were addicted to it,4,6 because its usage was strictly controlled,6 it is probable that quantities of pituri used beyond the immediate localities where the plant was to be found were low.9 Pituri would remain an important social and trading commodity until the early twentieth century,4 but its traditional methods of preparation and constraints on use were lost in the decades following European settlement.4,5
Tobacco, and the practice of smoking, first reached the shores of northern Australia at the beginning of the eighteenth century, when Macassan fishermen sailed from the Indonesian island now known as Sulawesi in search of pearls and trepang (a seafood delicacy intended for export to China). The trade was important to the Macassans. About a thousand men would make the voyage each year and stay in the region for several months at a time, until operations were abandoned two centuries later in the early 1900s.8

The Macassans acknowledged Indigenous ownership of the land and offered pipes, tobacco and other valued goods as tribute to local populations and in return for access to coastal waters and camping places ranging between the Kimberley to the Gulf of Carpentaria.6 The Macassan method of smoking, with a characteristic long-stemmed pipe formed from a crab claw, a hollow root or a reed,7 became part of Indigenous social and ceremonial life in these areas,9 and is still in use in the East Arnhem region.3 Macassan goods, including tobacco and pipes, were prized as trade items by the local population and were borne far inland.6 However, given the sporadic nature of supply from the Macassan fisherman, it is unlikely that exposure to the new tobacco resulted in ongoing addiction.9

Tobacco smoking was also introduced into Cape York and the Torres Strait region, although it is not clear by whom, and according to early eye-witness accounts, Torres Strait Islanders grew plants that contained nicotine and smoked pipes made of bamboo.13 While it cannot be said for sure just how widespread nicotine usage became,8 it is likely that people in south-eastern Australia did not have access to nicotine before European contact.14

With the arrival of the First Fleet in 1788, British patterns of tobacco usage were introduced to Australia. Tobacco was commonly used by all echelons of colonial society; officers and other socially elevated males using snuff and later cigars; the marines and convicts favoured clay pipes.5

Tobacco was often presented in early encounters between the Europeans and Indigenous people as a token of goodwill and conciliation.8 The introduced tobacco and pipes soon became popular and widely sought after by Indigenous communities, whether or not they had been users of bush tobaccos or pituri,8 and were highly valued, along with other introduced commodities such as blankets, flour and sugar. The Indigenous desire for tobacco and other wares was quickly recognised by the European settlers, who offered them in exchange for labour, goods and services, and hoped that such inducements would lead the Indigenous occupants of the land to forego their traditional lifestyle and become compliant participants in the settlement’s activities.6 For their part, the Indigenous population actively set about obtaining tobacco and other prized goods from their new sources. Communities negotiated and bargained, exacting tobacco and supplies as just consideration for use of the land and resources, in accordance with Indigenous tradition.6 However the colonial intention to instil a Western work ethic, with its keystones of regular habits, subordination of servant to master, economic incentives and accumulation of wealth and goods, remained contrary to the Indigenous world view.6

That said, tobacco trade in the early days of colonisation has been interpreted as a process of ‘mutual exploitation’, both parties for the most part initially deriving satisfaction from their side of the transaction.6 If the new settlers had the advantage of controlling tobacco supplies, the local inhabitants equally had the option of providing or withholding information, labour and other markers of cooperation vital to the Europeans. Over time, however, this balance would firmly come to favour the new settlers.

Over the following years, usage—and hence addiction to nicotine—permeated vast tracts of the continent, with the expansion of European outposts through explorers, missionaries, pastoralists, cattle farmers, miners, fishermen and anthropologists.7,8,14 In contrast to the European population, tobacco was used by Indigenous men, women and children.10 Tobacco was also a trade item for some Indigenous groups, allowing the product to penetrate distant regions of Australia long before direct white contact was made.6

The development of tobacco dependency among Indigenous people was variously interpreted by the colonists as a ‘civilising’ or a ‘taming’ influence: civilising because it could aid discourse and engender goodwill, and taming because it had the capacity to produce a cheap labour force prepared to work in return for tobacco.6,15 Widespread nicotine addiction made the Indigenous populations vulnerable to manipulation by the settlers, who could make provision of tobacco dependent upon compliance.8 At least one Victorian squatter deliberately fostered tobacco use among local Indigenous people, enabling him to secure their ongoing services in return for small amounts of tobacco.7 Tobacco became standard payment in kind. During the 1800s and the early decades of last century, Aboriginal peoples and Torres Strait Islanders worked in often brutal circumstances for the cattle and pastoral industries, on sugar plantations, in road gangs, and in the pearl shell and trepang trade, remunerated in full or in part with tobacco.6,11 And not only labour was paid for with tobacco. Material goods, such as artefacts and ceremonial objects, and intellectual property, including language, local knowledge, oral history and cultural heritage, were acquired by collectors, anthropologists and other researchers in return for tobacco.6
The decades following European colonisation saw gradual movement of communities of Indigenous peoples into white settlements, in response to a range of influences, including government policies and other prevailing circumstances, and desire for a range of provisions, including tobacco. This process has been described as a form of 'accidental migration', whereby once the relocation occurred, reversal became increasingly difficult as intimate knowledge of homelands faded, and dependency and habit bred a new way of life that became normal to successive generations. As more people moved to missions or settlements, traditional ways of living were less viable for those left behind. The drift to white settlement became difficult to resist. Populations that had survived for thousands of years virtually without external intervention were soon to become dependent on European settlement, as a result of which many were to suffer marginalisation and segregation, and shift their connections with their lands and traditional ways of living, as well as their languages, histories and cultures.

On pastoral mission stations, whether run by churches, the government or privately, tobacco formed an important part of rations, and was provided with the expectation of compliance in a regimen of work (and, in the Christian missions, participation in religious activities as well). Tobacco rations undoubtedly initiated and reinforced tobacco use among many individuals, and although the practice of including tobacco in rations declined from the 1940s onwards, it did not stop completely on cattle stations until the late 1960s. Interestingly, one researcher has observed that in some remote communities, tobacco is still used as an 'ice breaker' by some health professionals as well as anthropologists and lawyers to facilitate their work.

Pre-existing traditions of nicotine use and barter among much of the Aboriginal and Torres Strait Island population predisposed them to ready acceptance of European tobacco, but the process of colonisation was to change Indigenous patterns of tobacco use for ever. The cultural mores relating to traditional tobacco use vanished as the 'pituri clans', the custodians of ritual and knowledge, lost their way of life or died out, and ready-processed tobacco became widely available in ample quantities. The relentless process of more than 200 years of colonisation has done much to reinforce smoking in these populations. The effects of ill-conceived social control policies, such as relocation of people from traditional homelands and enforced separation of children and families, and the cumulative burdens of racial prejudice and socio-economic disadvantage, have contributed to continuing socio-economic disadvantage and lower health status for Aboriginal peoples and Torres Strait Islanders as compared to non-Indigenous Australians.

Socio-cultural aspects of modern day tobacco use are also discussed in Section 8.9, and socio-economic issues are discussed in sections 8.3 and 8.8.

References


8.3 Prevalence of tobacco use among Aboriginal peoples and Torres Strait Islanders

Tobacco use is widespread among Aboriginal and Torres Strait Islander populations, although prevalence varies between regions and communities across Australia. The first major national study measuring smoking prevalence in the Indigenous population was the National Aboriginal and Torres Strait Islander Survey in 1994, subsequently updated with the National Aboriginal and Torres Strait Islander Social Surveys of 2002, 2008, and 2014–15. National baseline data on drug use among urban Aboriginal peoples and Torres Strait Islanders were also collected in 1984 as a supplement to the National Drug Strategy Household Survey. Successive National Drug Strategy Household Survey reports in 1998, 2001, 2004, 2007, 2010, and 2013 have included data on tobacco use among these populations. The National Health Surveys of 1995 and 2001 also provide data sets, and the National Aboriginal and Torres Strait Islander Health Surveys for 2004–05 and 2012–13 have been added to this series, expanding on the Indigenous component of the earlier National Health Survey reports. As the most recent report in these series, most of the data presented in this section come from the National Aboriginal and Torres Strait Islander Social Survey, 2014–15 and the National Aboriginal and Torres Strait Islander Health Survey for 2012–13.

Table 8.3.1 shows the prevalence of daily smoking in 2014–15 by sex, Indigenous status, and age group. When compared to the overall Australian population, Aboriginal peoples and Torres Strait Islanders have a substantially higher prevalence of smoking for all age groups among both men and women. Thirty-nine per cent of the combined Aboriginal and Torres Strait Islander population aged 15 and over were daily smokers, compared with 14% in the general population. After adjusting for differences in age structure, Aboriginal and Torres Strait Islander people aged 15 years and over were almost three times as likely as non-Indigenous people to be daily smokers. Prevalence appeared to be slightly higher among Aboriginal people (39%) than Torres Strait Islander people (35%). There were no significant differences between Indigenous men and women in daily smoking except for 15–24 year olds and 45–54 year olds, where the proportion of men was higher.

<table>
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<th>Females</th>
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<tr>
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<td>Non-Indigenous</td>
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</table>

* Current daily smokers are those who smoke one or more cigarettes (either manufactured or roll-your-own), cigars or pipes per day, on average. Chewing tobacco and smoking of substances other than tobacco are excluded.

Sources: National Aboriginal and Torres Strait Islander Social Survey, Australia, 2014–15; National Health Survey: First Results, Australia, 2014–15.

There have been progressive decreases in daily smoking prevalence among Indigenous Australians over time. In 2002, almost half (49%) of Aboriginal and Torres Strait Islander people aged 15 years and over were daily smokers, with rates declining to 45% in 2008, and to 39% in 2014–15. Prevalence declined across this period for both Indigenous men (51% to 46%) and women (47% to 43% to 36%).

Data from the National Aboriginal and Torres Strait Islander Health Survey show that between 2002 and 2012–13, the proportion of Indigenous ex-smokers increased from 15% to 20%, and the proportion of Indigenous never smokers increased from 33% to 36%. Among young people aged 15–17 years, the proportion who had never smoked increased from 61% in 2002 to 77% in 2012–13, and for those aged 18–24 years, increased from 34% to 42%, suggesting that there has been a progressive decrease in uptake by young Aboriginal and Torres Strait Islander people.

The considerable impact of smoking on the health of Aboriginal peoples and Torres Strait Islanders is detailed in Section 8.7. For discussion about recommended tobacco-control interventions designed to meet the needs of these population groups, refer to sections 8.10 and 8.13.

8.3.1 Geographical variations in smoking rates

While the figures in the above tables provide a broad overview of smoking prevalence among Aboriginal peoples and Torres Strait Islanders, it is important to note that patterns of smoking are not uniform throughout Aboriginal and Torres Strait Islander communities. Although smoking prevalence among Indigenous Australians has been declining in both non-remote and remote areas, most of the change has occurred in non-remote areas. The proportion of daily smokers in non-remote areas decreased from 48% in 2002 to 37% in 2014–15, while in remote areas, there was a decrease of only three percentage points over the same period, from 50% to 47%. Figure 8.3.1 shows the proportion of current daily smokers by remoteness area and Indigenous status.
There are also variations in prevalence by gender within these jurisdictions. For example, in 2012–13 (National Aboriginal and Torres Strait Islander Health Survey data), daily smoking was more common among Indigenous men living in the Northern Territory (58%) and South Australia (46%) than Indigenous women in these states (44% and 35%, respectively; see ABS Table 24).

More striking, however, are the variations in smoking behaviour between smaller regions and individual communities. The 2012–13 National Aboriginal and Torres Strait Islander Health Survey examined prevalence of smoking as defined by Aboriginal and Torres Strait Islander Commission region, and found a large variation between regions. For example, daily smoking prevalence ranged from 28% in the Australian Capital Territory, to 68% in Katherine. There were also marked gender differences within some regions; prevalence among Indigenous men in West Kimberley was 89%, compared with 48% among Indigenous women in the same region (see ABS Table 23). Other regional and community-specific surveys have also demonstrated marked differences. For example, a survey of Aboriginal and Torres Strait Islander women aged 15–34 years in 23 communities in far north Queensland found a smoking prevalence of 62%, and studies have confirmed higher levels of smoking in the Top End of the Northern Territory than for the Indigenous population as a whole.

The most recent of these studies found smoking prevalence of 76% and 70% in Top End communities.

Readers interested in examining earlier regional prevalence surveys are referred in the first instance to the comprehensive literature review by Ivers, which provides a summary of research up until 1999.

### 8.3.2 Socio-economic factors

Socio-economic factors are strongly related to smoking behaviour throughout the general Australian population (see Chapter 1, Section 1.5 for further discussion).

Aboriginal peoples and Torres Strait Islanders are still significantly more likely than non-Indigenous people to be disadvantaged, in measures such as educational attainment, employment, income, and home ownership. Despite government initiatives to close the employment gap, it widened by 7% between 2008 and 2012–13 (from 22% to 29%). The employment-to-population ratio for Indigenous people aged 15 to 64 increased from 38% in 1994 to 54% in 2008, and then declined to 48% in 2012–13. For non-Indigenous people, it has remained steady at about at about 76%. Indigenous Australians have relatively low average weekly incomes compared with non-Indigenous people and are under-represented in the highest income bracket. The ratio of Indigenous to non-Indigenous average income is about 0.7.

Moreover, individuals from Aboriginal and Torres Strait Islander backgrounds are over-represented among those Australians who experience mental illness (as evidenced by self-reported levels of psychological distress, depression, higher rates of hospitalisation for mental illness, and death and injury through suicide and intentional injury), homelessness, and exposure to the criminal justice system as offenders (with imprisonment at 13 times the rate of non-Indigenous people and juvenile detention at 23 times the rate for non-Indigenous youth). Each of these factors is associated with a greater likelihood of smoking (see Chapter 1, Section 1.6). The overall higher degree of disadvantage experienced by Aboriginal peoples and Torres Strait Islanders is likely to be a major contributor to the high prevalence of smoking.

The prevalence of smoking also varies within the Aboriginal and Torres Strait Islander populations according to socio-economic factors, as they do in the general Australian population. Smoking is more prevalent among Aboriginal peoples and Torres Strait Islanders who have less education, are unemployed, are renting rather than owning or buying their own home, and who are in the lower income brackets. Table 8.3.3 presents findings for the 2012–13 National Aboriginal and Torres Strait Islander Health Survey, with data for the non-Indigenous population from the 2011–12 Australian Health Survey included for comparison. When comparing Indigenous and non-Indigenous people of similar socio-economic status, Indigenous people have a higher smoking prevalence than for non-Indigenous people.

<table>
<thead>
<tr>
<th>Current daily smokers (% rounded)</th>
<th>Age-standardised rate ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Territory</td>
<td></td>
</tr>
<tr>
<td>Tasmania</td>
<td></td>
</tr>
<tr>
<td>Western Victoria</td>
<td></td>
</tr>
<tr>
<td>South Australia</td>
<td></td>
</tr>
<tr>
<td>Queensland</td>
<td></td>
</tr>
<tr>
<td>Victoria</td>
<td></td>
</tr>
<tr>
<td>New South Wales</td>
<td></td>
</tr>
</tbody>
</table>

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**Figure 8.3.2** Percentage of current daily smokers, Aboriginal and Torres Strait Islander people aged 18+, by state or territory, 2014–15

Source: National Aboriginal and Torres Strait Islander Social Survey, Australia, 2014–15, Table 23

There are also variations in prevalence by gender within these jurisdictions. For example, in 2012–13 (National Aboriginal and Torres Strait Islander Health Survey data), daily smoking was more common among Indigenous men living in the Northern Territory (58%) and South Australia (46%) than Indigenous women in these states (44% and 35%, respectively; see ABS Table 24).

More striking, however, are the variations in smoking behaviour between smaller regions and individual communities. The 2012–13 National Aboriginal and Torres Strait Islander Health Survey examined prevalence of smoking as defined by Aboriginal and Torres Strait Islander Commission region, and found a large variation between regions. For example, daily smoking prevalence ranged from 28% in the Australian Capital Territory, to 68% in Katherine. There were also marked gender differences within some regions; prevalence among Indigenous men in West Kimberley was 89%, compared with 48% among Indigenous women in the same region (see ABS Table 23). Other regional and community-specific surveys have also demonstrated marked differences. For example, a survey of Aboriginal and Torres Strait Islander women aged 15–34 years in 23 communities in far north Queensland found a smoking prevalence of 62%, and studies have confirmed higher levels of smoking in the Top End of the Northern Territory than for the Indigenous population as a whole.
Experiencing more than one life stressor and feeling financial stress in the previous year (defined as lacking the ability for themselves or another household member to access $2000 in an emergency) were also indicators for increased risk of smoking in Indigenous adults in the 2002 and the 2004–05 national Aboriginal and Torres Strait Islander surveys.\(^{27,28}\) The 2004–05 survey also reported significant associations between smoking and higher levels of psychological distress\(^{29}\) or having a disability or other long-term health condition.\(^{30}\) Data from the 2002 National Aboriginal and Torres Strait Islander Social Survey show that Aboriginal and Torres Strait Islanders who had been arrested or incarcerated in the last five years were significantly more likely to be smokers; those who reported all four of ‘arrested in last 5 years’, ‘incarcerated in last 5 years’, ‘used legal services in past 12 months’ and ‘victim of violence in past 12 months’ were nearly 10 times more likely to be smokers than those who did not report any of these experiences.\(^{37}\)

Although Aboriginal and Torres Strait Islander communities have had different experiences of colonisation, the colonising process has overall had an important influence on ongoing patterns of tobacco use by Aboriginal peoples and Torres Strait Islanders (see Section 8.2). Detailed analyses of the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 National Aboriginal and Torres Strait Islander Social Survey identify removal from family as significantly related to being a smoker.\(^{26,27}\) After adjusting for age, gender and socioeconomic variables, the 2002 Social Survey data showed that Aboriginal and Torres Strait Islander people were twice as likely to be smokers if they had been removed from their natural family.\(^{27}\)

There is a significant association between racism and smoking.\(^{30}\) A study of pregnant Indigenous women in Perth reported that stress related to racial discrimination was a factor contributing to their smoking.\(^{31}\)

### 8.3.3 Prevalence of smoking among pregnant women

Data from the 2012 National Perinatal Data Collection reports that almost half (48%) of Indigenous mothers smoked during pregnancy compared to 13% of non-Indigenous mothers.\(^{32}\) Between 2005 and 2011, there was a statistically significant decline (of 6%) in smoking during pregnancy among Indigenous women, but this drop was much greater among non-Indigenous women (25%).\(^{33}\) Several local or regional studies have confirmed that Indigenous women have a higher prevalence of smoking during pregnancy and after giving birth than non-Indigenous women, with reported smoking prevalence ranging from 41–67%.\(^{34,41}\) An analysis of the 2007 National Perinatal Data Collection shows that smoking rates for Indigenous mothers was highest for those in outer regional areas (56%) and lowest for those in major cities (49%).\(^{35}\) Indigenous mothers aged under 20 years reported smoking rates during pregnancy of 53.6%. Smoking rates declined with age, so that 49.6% of mothers aged 35–39 smoked during pregnancy.\(^{37}\) This trend of higher smoking rates during pregnancy among teenage Indigenous women has also been found in other studies in Queensland, South Australia and Western Australia.\(^{18,41,43}\) The South Australian study also reported that the likelihood of smoking heavily (consuming 20 or more cigarettes daily) increased with age, and at all ages except for during their teens, Indigenous women smoked more heavily during pregnancy than non-Indigenous women.\(^{43}\)

See Section 8.7.3.5 for health impact of smoking during pregnancy and Section 8.10.13.3 for tobacco action initiatives that address smoking during pregnancy.

### 8.3.4 Prevalence of smoking among health workers

A range of small surveys and anecdotal evidence\(^{44,50}\) suggest that Aboriginal and Torres Strait Islander health workers have a high prevalence of smoking. Findings have ranged between 38% and 51%,\(^{45,47–49,51}\) and about 60–64%.\(^{46,49}\) One survey, undertaken as part of the National Aboriginal and Torres Strait Islander Tobacco Control Project, found that 39% of health workers who participated in focus groups for the project were smokers. Lindoorff observed that this was likely to be an underestimate of actual smoking rates among health workers, since smokers were noticeably less likely to volunteer to participate.\(^{42}\) Research has found that many Indigenous health workers who smoke, smoke heavily,\(^{46}\) and that tobacco use provides a means of coping with the stressful nature of their workloads.\(^{48,52}\) A 2013 study of Aboriginal health workers in South Australia found that the prevalence of current smokers was 50.8%, non-smokers (49.2%) comprised quitters (22.4%) and never smokers (27.1%).\(^{51}\) Surveys of staff of Aboriginal community-controlled health services in 2012–13 found that smoking prevalence among Aboriginal and Torres Strait Islander staff was lower than their general communities, but only modestly lower than among other employed Aboriginal and Torres Strait Islander people.\(^{50,51}\) These studies indicate a need for appropriate support and education for health workers as well as the communities in which they work. See Section 8.10.5 for further information on the role of Indigenous health workers in tobacco control, and Section 8.13.5 on policy and funding initiatives to support the health workforce in Aboriginal and Torres Strait Islander health.

### 8.3.5 Prevalence of smoking among prisoners

Smoking rates among prisoners are generally much higher than in the general community and Aboriginal and Torres Strait Islander people are significantly overrepresented in the prison population. In 2014, 27% of the total adult prisoner population were Indigenous, and between 2000 and 2014 there was an 82% increase in the gap in imprisonment rates between Indigenous and non-Indigenous people.\(^{24}\) The 2012 Australian Institute of Health and Welfare report on the health of Australia’s prisoners found that compared with non-Indigenous prisoners, Indigenous people were more likely to be a current smoker on entry to prison (52% compared with 83%), were more likely to increase cigarette consumption during their incarceration (38% compared with 32%), and were less likely to be an ex- or non-smoker upon discharge (17% compared with 21%).\(^{55}\) However, rates vary between jurisdictions. The 2009 New South Wales Inmate Health Survey found that 83% of non-Aboriginal male prisoners were current smokers, compared to 71% of non-Aboriginal prisoners; however, Aboriginal prisoners smoked significantly fewer cigarettes per day. Among women, the rates were 88% and 76% for Aboriginal and non-Aboriginal respectively.\(^{56}\) Importantly, the large majority (90% of Aboriginal men and 80% of Aboriginal women) said that they would like to quit smoking.\(^{56}\) Smoking rates while in prison and upon discharge are likely to be lower since all Australian states and territories except Western Australian have introduced or are planning to introduce complete smoking bans. Smoking cessation programs for Indigenous prisoners, and the more recent implementation of total prison smoking bans, are discussed in Section 8.10.13.4.

### 8.3.6 International comparisons with other Indigenous peoples

International research has shown that Indigenous groups in settler colonial countries use tobacco at significantly higher levels than the dominant population (Table 8.3.4). Notwithstanding the differences between these populations and their specific cultural and historical circumstances, it is likely that these higher prevalence figures also reflect socio-economic disadvantage, and the legacy of colonisation including experiences of marginalisation, family dislocation, racism, disconnection from land, loss of traditional diet and lifestyle, and the subsequent adoption and adaption of Western habits and practices.\(^{57}\)
<table>
<thead>
<tr>
<th>Country</th>
<th>Indigenous people</th>
<th>Non-Indigenous people</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indigenous group (year of data) Prevalence (%)</td>
<td>Ethnic group (year of data) Prevalence (%)</td>
</tr>
<tr>
<td>Indigenous off-reserve† (2000–01)</td>
<td>34.8</td>
<td></td>
</tr>
<tr>
<td>Inuit (2009–10)</td>
<td>44.4</td>
<td></td>
</tr>
<tr>
<td>Metis (2009–10)</td>
<td>34.6</td>
<td></td>
</tr>
<tr>
<td>New Zealand†</td>
<td>Māori (2012) 39</td>
<td>European/Other (2012) 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanics (2013) 12.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Asian Americans (2013) 9.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-Hispanic whites (2013) 19.4</td>
</tr>
<tr>
<td>Australia†</td>
<td>Aboriginal and Torres Strait Islanders† (2014–15) 39</td>
<td>Non-Indigenous (2014–15) 14</td>
</tr>
</tbody>
</table>

* The National Drug Strategy Household Survey for 2013, as in previous years, reports on a small Indigenous sample. The prevalence of smoking reported in the 1994, 1998 and 2001 surveys was similar to that of the other national surveys discussed above. However, later surveys returned much lower prevalence figures of 39% (2004), 34% (2007), 38% (2010), and 35% (2013). Given the consistently higher prevalence data published by other, larger national surveys, it is likely that the National Drug Strategy Household Survey figure is an outlier. This is probably due to differences in sampling between the 2001 and subsequent surveys, and to smaller proportionate samples of Indigenous people with each survey. It is known that there is considerable variation in smoking rates between various Indigenous communities, which if not sampled in a comparable manner between surveys, could be expected to skew results.

The 36 Aboriginal and Torres Strait Islander Commission regions were legally prescribed areas for the purposes of administration by the now superseded Aboriginal and Torres Strait Islander Commission and the Torres Strait Regional Authority.

For the purposes of this survey, the Australian Bureau of Statistics defined stressors as one or more events or circumstances which a person considered to have been a problem for themselves or someone close to them in the last 12 months, including: serious illness, accident or disability, death of a family member or close friend, divorce or separation, inability to obtain work, alcohol or drug-related problems, being the victim of abuse, overcrowding, discrimination or racism. For a full list refer to the Glossary section of the National Aboriginal and Torres Strait Islander Health Survey 2004–05.

Assessed by a modified version of the Kessler Psychological Distress Scale to measure non-specific psychological distress. See National Aboriginal and Torres Strait Islander Health Survey 2004–05 for further information.

References


8.4 Smoking among Aboriginal and Torres Strait Islander children and teenagers

8.4.1 Prevalence

8.4.1.1 National surveys

The National Health Surveys, the 2004-05 and 2012-13 National Aboriginal and Torres Strait Islander Health Surveys, and the National Drug Strategy Household Surveys (NDSHS) of 1998, 2001, 2004, 2007, 2010, and 2013 have collected data among Aboriginal peoples and Torres Strait Islanders aged 14 or 15 and older, or 18 and older; however, individual year-of-age breakdowns are not published in any of these surveys and numbers of Indigenous participants in the younger age ranges would be extremely small in the NDSHS surveys. The most recent National Aboriginal and Torres Strait Islander Health Survey for 2012–13 reported that 21.3% of Indigenous young people aged 15–17, and 43.8% of those aged 18–24 were current daily smokers, compared to 4.1% and 17.3% of non-Indigenous young people in the same age groups, respectively (from the Australian Health Survey 2011–13).1

From 1996 onwards, the Australian Secondary Students’ Alcohol and Drug (ASSAD) survey included the option to report being of Aboriginal and/or Torres Strait Islander descent.2 Between 1996 and 2005, Indigenous students consistently reported higher levels of smoking than non-Indigenous students (see Table 8.4.1). After adjusting for state, education sector, sex, age, academic ability and amount of pocket money available, these differences were significant for most years and smoking behaviours (only three were not significant—see Table 8.4.1). A decline in smoking prevalence among Indigenous students was noted, with most of that change occurring between 1999 and 2002, and little change between 2002 and 2005. Smoking prevalence among non-Indigenous students also declined, but more evenly across the years.2

In 2008, the ASSAD survey included an ‘extension’ whereby an additional 19 schools from rural areas of Western Australia, Queensland, Victoria, South Australia and the Northern Territory were surveyed. The increase in the rural sample also increased the Indigenous sample. From the 400 schools surveyed as part of the 2008 ASSAD and the ASSAD Extension, 1317 students identified as Indigenous. About 35% of 12–15 year old Indigenous students had ever smoked, with 15% smoking in the month before the survey and 12% smoking in the past week. Indigenous students also had higher mean scores on ‘intention to smoke in the next 12 months’, which is considered indicative of students’ receptivity to taking up smoking and is predictive of future smoking among adolescents and adults.3 This finding is consistent with those of the earlier ASSAD surveys.2

8.4.1.2 State and regional surveys

A number of region-specific surveys of Indigenous adolescent smoking behaviour have been undertaken, varying in size, scope, and methodology. These surveys generally show that the prevalence of smoking increases with age and is higher among Indigenous than non-Indigenous adolescents. Findings from the 2009 Victorian Adolescent Health and Wellbeing Survey, which surveyed young people in schools in years 7, 9 and 11, showed that the proportion of young Aboriginal people who had ever smoked was significantly higher than non-Aboriginal people (36.1% compared to 24.9%). Aboriginal students were also significantly more likely to have smoked in the past year and month, but smoked a similar number of cigarettes per day to non-Aboriginal smokers, with half smoking less than one per day, and about 20% smoking six or more per day. Aboriginal youth were significantly more likely than non-Aboriginal youth to report having ‘very’ or ‘sort of’ easy access to cigarettes (63.7% versus 47.2%).6

An earlier study of smoking behaviour among Indigenous primary and high school-aged children in three remote Top End (north Northern Territory) communities in 1997 reported that rates of current smokers (those who had smoked in the last week) were higher in most teenage years among the Indigenous population than for the national secondary school population.7 The youngest current smoker was aged six, and 6% of children aged 8 and under were smokers. In the teenage years, experimentation and current smoking increased with age. Among students aged 16 or more, experimentation with smoking was universal, and half were current smokers, equivalent to the adult smoking prevalence for Aboriginal peoples and Torres Strait Islanders from around the same period.5

A series of surveys undertaken in schools in New South Wales during 1989, 1992 and 1996 also showed that Aboriginal and Torres Strait Islander students aged between 12 and 17 were more likely to smoke than their non-Indigenous counterparts. The most recent of these surveys (1996) found that overall smoking prevalence among children of Aboriginal or Torres Strait Islander descent was 30%, compared to 20% for non-Indigenous children. Smoking prevalence was highest among Indigenous girls (33%), followed by Indigenous boys (27%), non-Indigenous girls (21%) and non-Indigenous boys (19%). Higher patterns of tobacco use were also evident from the earlier years’ survey data.7

Research in the 1990s with community-based samples showed similar trends. A study in Albany, Western Australia found that tobacco was commonly the earliest drug used among Indigenous people aged 8–17.8 However, most youth (64%) had never smoked tobacco. Frequent smokers increased with age, from 4% of the 8–12 age group to 44% of the 15–17 age group. Although not directly comparable because of differences in school retention rates, Indigenous children in Albany (both in and out of school) were more likely to have smoked in the past week than secondary school children aged 12–17 in Western Australia in 1996 (36% compared with 21%).9 Another study of Aboriginal young people in Melbourne found that 29% aged 12–15 years and 63% aged 16–25 years reported being current smokers,9 compared with 18% of 12–15 year olds in the ASSAD survey of 1996.9 Thirty-one per cent of the

Table 8.4.1

Percentage of students self-identifying as Indigenous and non-Indigenous who have ever smoked, who are monthly smokers, current smokers, and committed smokers in each survey year between 1996–2005* (data not weighted)

<table>
<thead>
<tr>
<th>Smoking behaviour</th>
<th>12–15 year olds</th>
<th>16–17 year olds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever smoked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Indigenous</td>
<td>54%</td>
<td>47%</td>
</tr>
<tr>
<td>Indigenous</td>
<td>61%</td>
<td>61%</td>
</tr>
<tr>
<td>Monthly smokers†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Indigenous</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>Indigenous</td>
<td>30%</td>
<td>32%</td>
</tr>
<tr>
<td>Current smokers‡</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Indigenous</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>Indigenous</td>
<td>27%</td>
<td>28%</td>
</tr>
<tr>
<td>Committed smokers§</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Indigenous</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Indigenous</td>
<td>19%</td>
<td>22%</td>
</tr>
</tbody>
</table>

* Differences between Indigenous and non-Indigenous students are significant except for the cells indicated
† Monthly smoking—smoked in the past four weeks
‡ Current smoking—smoked in previous seven days
§ Committed smoking—smoked on three of previous seven days


Last updated: August 2016
Melbourne Aboriginal young people aged 12–25 years had never smoked, and 66% of those who were smoking indicated that they wanted to give up.\textsuperscript{9} More recently, a small study undertaken in the Northern Territory in 2011 found that 46% of Indigenous participants aged 13–20 were smokers, compared with 16% of non-Indigenous participants.\textsuperscript{10}

Not all studies support the finding that Indigenous adolescents have a uniformly higher prevalence of smoking than non-Indigenous adolescents. The Western Australian Aboriginal Child Health Survey 2000–02\textsuperscript{11} found that the prevalence of smoking was not significantly different between Indigenous and non-Indigenous 12–16 year olds. However, the difference increased with age among girls. Figure 8.4.1 presents data from the 2000–02 survey, as well as the 1995 Western Australian Aboriginal Child Health Survey, which asked the same question of 12–16 year-olds in the general Western Australian population and is the only available comparable data. While the prevalence of smoking tended to be higher among Indigenous females than Indigenous males, by age 17 (not shown in Figure 8.4.2 as data is not available for non-Indigenous 17 year olds), they were smoking at about the same rate (56% for males and 60% for females).\textsuperscript{11}

A 2004 study in rural North Queensland showed that 24% of Indigenous students in years 8–12 smoked, compared to 30% of non-Indigenous students. In the younger grades (years 8–10), 18% of Indigenous males and 26% of Indigenous females were smokers, compared to 28% of both sexes among the non-Indigenous students. Prevalence increased with age for both groups, with the highest incidence of smoking occurring in years 11 and 12 among Indigenous males (46%), followed by non-Indigenous females (38%), Indigenous males (32%) and non-Indigenous males (30%). Given the lower rate of high school retention\textsuperscript{7,13,14} and higher levels of school absenteeism among Indigenous teenagers,\textsuperscript{5,12} school-based surveys may result in an underestimation of smoking prevalence, particularly among students in Year 10 and beyond. For example, the 2001–02 Western Australian Aboriginal Child Health Survey showed that Indigenous children aged 12–17 who did not attend school had substantially higher smoking rates (48% of boys and 64% of girls) than those who did attend school (25% of boys and 31%).\textsuperscript{13} Nonetheless, authors of the North Queensland study comment that their results ‘challenge the belief that Indigenous youth are significantly different in their smoking patterns and behaviours compared to non-Indigenous secondary school students in rural regions’ (p101). They conclude that geographical location may be a more important determinant of smoking than ethnicity in regional areas, with students sharing similar attitudes, beliefs and behaviours regarding cigarette use.\textsuperscript{13}

**8.4.2 Age at uptake**

According to national data, Aboriginal peoples and Torres Strait Islanders who smoke are more likely to have begun smoking at an earlier age than their non-Indigenous counterparts. A comparison between the National Aboriginal and Torres Strait Islander Health Survey and the National Health Survey, both of 2004–05, shows that about 10% of Indigenous adults who were current and former smokers had commenced regular smoking prior to the age of 13, compared with 5% of non-Indigenous current and former smokers. By the age of 18, 68% of current and former Indigenous smokers were smoking regularly, compared with 54% of non-Indigenous current and former smokers. Indigenous people living in non-remote areas were more likely to be smoking before the age of 13 years than Indigenous people living in remote areas (11% compared with 5%).\textsuperscript{15}

Other research has also pointed to an earlier age of uptake of tobacco use among children of Aboriginal and Torres Strait Islander descent.\textsuperscript{5,16,17} However, as with the various prevalence surveys described above, regional variation is evident, reflecting socio-demographic and cultural factors. Within Aboriginal and Torres Strait Islander communities, there is a general perception among adults that children are taking up smoking at about the age of 10.\textsuperscript{18} Indigenous young people interviewed in the Top End of Australia in 2011 reported that experimenting with smoking usually started between the ages of 10 and 13, but it was not uncommon to take the first puff earlier and as early as seven or eight years of age.\textsuperscript{15} Early uptake increases duration of exposure, and hence the risk of development of a range of tobacco-caused diseases.\textsuperscript{15} Furthermore, research shows that the earlier a young person starts smoking, the more likely they are to become addicted, to continue smoking as adults, and to smoke heavily.\textsuperscript{20}

Research into substance use among Indigenous and non-Indigenous primary school students aged 8–12 in metropolitan and far north Queensland in 1999 found that Indigenous and non-Indigenous children experimented with tobacco at comparable rates, with about one in five students in this age bracket having tried smoking.\textsuperscript{21} The likelihood of experimentation increased with age; 9% of nine year olds reported having ever smoked, rising to 41% among 12–13 year old students. Given there were no significant differences between tobacco use by Indigenous and non-Indigenous children, the authors conclude that the excess uptake noted in the Indigenous population occurs in the early years of secondary school. Similarly, research on secondary school students in North Queensland found that only a small proportion of both Indigenous and non-Indigenous current smokers reported that they had started smoking at the age of seven (3% and 2%, respectively). By age 12, 26% of Indigenous and 19% of non-Indigenous smokers had begun smoking.\textsuperscript{13} Earlier patterns of uptake have also been reported in Albany, Western Australia. Among current Indigenous smokers aged between 15–17, the mean age of reported first use of tobacco was 9.7 years.\textsuperscript{9} Twenty-four per cent began smoking before the age of eight, and 71% had commenced by age 13.

**8.4.3 Influences on smoking behaviour**

Aboriginal and Torres Strait Islander young people are affected by the same determinants of smoking as Indigenous adults (see Section 8.3.2); that is, socio-economic factors such as employment, drinking alcohol, and being taken away from family as a child predict smoking among Indigenous young people.\textsuperscript{22,23} Similarly, Aboriginal and Torres Strait Islander young people report similar influences on uptake of smoking to non-Indigenous Australians, such as smoking among family members and parents,\textsuperscript{5,11,13,18,21} having a positive attitude towards smoking, and being part of a peer group that smokes.\textsuperscript{21,24} These peer influences may work in both directions; some Indigenous young people report seeking out social networks with similar smoking norms and behaviours to their own.\textsuperscript{10} Families can also influence uptake by facilitating access to tobacco. Smoking among Indigenous young people

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**Figure 8.4.1**

Prevalence of Western Australian Indigenous (2000–02) and non-Indigenous (1993) adolescents who have smoked regularly, aged 12–16, by age and sex

Source: Zubrick et al 2004\textsuperscript{12} and Zubrick et al 1995\textsuperscript{12}

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can also be an expression of rebellion, a way of risk-taking, a means of offsetting boredom or alleviating stress, or a way to cope with depression.\textsuperscript{9,18,25,26} Experimentation with other substances, such as alcohol and marijuana, also correlates with adoption of smoking.\textsuperscript{21}

The comparatively high rates of smoking among the Indigenous adult community mean that many Aboriginal and Torres Strait Islander children live in households where smoking is the norm. In 2014–15, about 58% of Indigenous children aged 4–14 lived with a daily smoker, and about 16% lived with someone who smoked inside the home.\textsuperscript{22} A study of Indigenous primary and high school-aged children in three remote ‘top end’ (north Northern Territory) communities\textsuperscript{23} found that almost every child (98%) lived with at least one smoker. Children who did not smoke cited having a non-smoking family as a reason for abstaining. Although the children surveyed demonstrated a reasonable knowledge about the health effects of smoking, tobacco use appeared to be viewed as a normal and expected part of being an adult.\textsuperscript{24} It was common for children to be asked to light cigarettes for adults, with about one-quarter having performed this task in the previous week.\textsuperscript{5} Similarly, interviews for the National Aboriginal and Torres Strait Islander Tobacco Control Project found that children asked to procure and light up parents’ cigarettes influenced later smoking behaviours.\textsuperscript{18}

Similar influences were noted in a Northern Territory study, where most participants reported initially stealing their cigarettes from family members and experimenting with cousins and peers. Some were also offered tobacco from family members, were asked to roll or purchase cigarettes for others in the family, or had parents buy their cigarettes for them.\textsuperscript{25} In this Northern Territory study, participants also reported that a significant influence on their initiation to smoking was the modelling of adult smoking behaviours, not only their own parents but also extended family.\textsuperscript{26} This is supported by Victorian research that has found that the high incidence of smoking among adults serves as modelling behaviour for children in Indigenous communities.\textsuperscript{27} Additionally, parents who smoked appeared to have the expectation that their children would smoke as well, and felt that they could not prevent their children from smoking because they would be perceived as hypocritical. Children also commonly reported obtaining cigarettes from their parents.\textsuperscript{28,29} Similarly, urban Aboriginal young people reported a perception that young people with friends, siblings and teachers who were smokers were more likely to be smokers themselves, and that the culture of sharing and social acceptance of smoking influenced uptake.\textsuperscript{30}

Other socio-demographic factors are likely to have a bearing on uptake of smoking among Aboriginal and Torres Strait Islander young people. A series of studies from New South Wales found that children of Aboriginal or Torres Strait Islander descent were twice as likely to live in rural or remote areas. About half of the children reported living with both of their parents, while 48% lived in single parent, step or blended couple families, or with neither parent, compared with 28% of non-Indigenous children. Indigenous were more than twice as likely to non-Indigenous children to consider their school performance to be below average (15% compared with 6%), and about twice as likely as to play truant (29% compared with 15%). Indigenous children also reported missing more school for health reasons than non-Indigenous children (28% compared with 16%) although both groups reported much the same incidence of ill-health (about 15%).\textsuperscript{21} Each of these factors increase the likelihood of uptake in smoking: lower levels of school performance, absenteeism, and stresses in the home,\textsuperscript{32} as well as stressful life events, financial insecurity and household structure (e.g. single parent households).\textsuperscript{21} These factors are likely to contribute to Indigenous Australians’ higher levels of involvement with tobacco and other substances. Programs to assist families, reduce school absenteeism and increase school retention are suggested ways forward, in collaboration with the communities involved.\textsuperscript{7}

Importantly, there are a number of protective factors associated with a reduced likelihood of smoking uptake among Indigenous youth. The positive role modelling of non-smoking family members is important in helping to prevent initiation to smoking.\textsuperscript{26} Home-based factors including: smokefree indoor spaces, parents not smoking around children, strong anti-smoking messages, and clear consequences to smoking, all help to prevent smoking in Indigenous young people, even when parents are smokers.\textsuperscript{10} A study of American Indian adolescents identified academic orientation, social support, community mindedness, and strong ethnic identity as being protective against smoking.\textsuperscript{33} These are similar findings to those of a study of Aboriginal young people in Melbourne that identified appreciation of Koori community values, creative activities, sense of responsibility, sense of belonging and community connection, pride in Koori identity, and sporting activities as protective against smoking.\textsuperscript{33} Fitness and the desire to play sport have also been directly reported by young Aboriginal and Torres Islander people as reasons for not taking up smoking.\textsuperscript{24,25}

Influences on the uptake of smoking among young people in general are discussed in greater detail in Chapter 5—Factors influencing the uptake and prevention of smoking.

\begin{itemize}
\item It may be that higher rates of Indigenous smoking in the older age groups in part reflects the fact that the National Aboriginal and Torres Strait Islander Survey questioned teenagers irrespective of their attendance at school, while the ASSAD excludes those not in the education system. It is generally reported in the literature that children outside the school system tend to exhibit higher smoking rates than those remaining at school.\textsuperscript{5}
\item Of the young people in the Western Australian Aboriginal Child Health Survey 2000–02 who indicated that they had ‘smoked cigarettes more than once or twice’, all then went on to indicate that they ‘had smoked daily for at least a month at some point in their lives’. These young people were classified as ‘regular smokers’, but clearly this term cannot be interpreted to necessarily mean ‘current smokers’. This makes it difficult to compare to the ASSAD surveys that define smoking characteristics differently. Similarly, the ASSAD surveys define those who have had even ‘a puff’ as ‘current smokers’. This makes it difficult to compare to the ASSAD surveys that define smoking characteristics differently.
\item “ever smokers”, while in the 2000–02 Aboriginal child health survey those who have never smoked and those who have smoked ‘just once or twice’ are classified together.
\end{itemize}

References


### 8.5 Types of tobacco used by and levels of consumption among Aboriginal peoples and Torres Strait Islanders

Similar to the general Australian population, most tobacco used by Aboriginal peoples and Torres Strait Islanders is in the form of conventional manufactured cigarettes. A smaller number of smokers prefer roll-your-own tobacco, pipes and chewing tobacco. The 2001 National Aboriginal and Torres Strait Islander Tobacco Control Project reported that ‘chop-chop’ (unbranded loose ‘black market’ tobacco) is also used in some communities.

#### 8.5.1 Manufactured and roll-your-own cigarettes (‘rollies’)

Most tobacco used by Aboriginal peoples and Torres Strait Islanders is in the form of manufactured cigarettes. The National Drug Strategy Household Surveys (NDSHS) of 2001, 2004, 2007, 2010, and 2013 found that average consumption levels among Indigenous smokers were higher than among other Australian smokers. In 2013, Indigenous smokers aged 14 and over reported consuming, on average, 115 cigarettes each week (16 cigarettes daily) compared with 95 cigarettes per week (14 per day) for non-Indigenous smokers. Indigenous men reported smoking 122 cigarettes per week, or 17 per day, compared to 96 cigarettes per week, or 14 cigarettes daily for non-Indigenous men; Indigenous women reported smoking 108 cigarettes weekly, or 15 cigarettes daily, compared with 94 cigarettes per week, or 13 cigarettes daily, for non-Indigenous women. The NDSHS data should be interpreted with some caution as sample sizes of Indigenous people are low, and survey methods may not capture a representative sample (see note i in Section 8.3). Data from the 2008 National Aboriginal and Torres Strait Islander Social Survey (which has a larger sample size) provides an estimate of the level of cigarette consumption for Indigenous smokers aged 15 and over of 15 cigarettes/person/day.

However, this figure is based on national data, and just as smoking rates vary between locations (see Section 8.3.1), consumption rates are also likely to vary (see below).

The national data sets indicate that most Indigenous smokers smoke fewer than 20 cigarettes per day, and this is supported by local level studies. Several studies conducted in communities across the Northern Territory have estimated rates of tobacco consumption using data on the sale of tobacco from local community stores and/or wholesalers, with three also collecting self-reported rates. Using sales data to estimate consumption is a practical and non-invasive method of estimating tobacco consumption in small remote communities with mostly Aboriginal populations, but sales data for lower aggregate levels is not routinely collected across Australia states and territories. Such studies have found that Aboriginal people in remote Northern Territory communities smoke between 6 and 8 cigarettes per day, on average. When comparing ‘lighter smokers’ (<10 cigarettes/day) to ‘heavier smokers’ (>10 cigarettes/day), ‘heavier smokers’ tended to be older, were more likely to be daily smokers, and were almost three times more likely to be men than women. A survey using wholesale tobacco data from Northern Territory remote communities calculated tobacco consumption to be 7 cigarettes/day/person aged 15 and over (note that this measure is ‘per person’, not ‘per smoker’), and found that tobacco consumption in 14 Aboriginal communities in the ‘Top End’ was more than double that in eight Central Australian communities (9 versus 4 cigarettes/day/person aged 15 and over). In another study using sales data in five Central Australian communities, daily smoking consumption was estimated to be between 6 and 8 cigarettes per day (based on assumptions of 70% and 50% smoking prevalence respectively). Although smoking prevalence rates may be high in these communities, consumption is low, and in many cases is lower than the consumption rate for non-Indigenous smokers of 14 per day. However, it should be noted that these findings might not be generalisable to the broader Indigenous population, as consumption levels tend to vary geographically.

Studies have also reported low levels of consumption among pregnant Indigenous women. A study in north Queensland found that over 60% of pregnant women who were current tobacco users smoked 10 or fewer cigarettes per day; furthermore, 40% of these
women were assessed as having low physical nicotine dependence.\textsuperscript{12} Similarly, a Northern Territory study of maternal smoking found that 71\% reported smoking 10 or fewer cigarettes per day.\textsuperscript{13}

It is also important to realise that the above figures represent average consumption levels. A number of reports, specific to Indigenous tobacco use, observe that since tobacco is often shared, and its purchase is dependent upon availability of funds, consumption may be sporadic and concentrated around pay days.\textsuperscript{2,17–19} Research involving urban Indigenous female smokers in Perth showed that about half of those respondents who smoked less often than daily, only smoked in conjunction with drinking alcohol. About the same proportion did not purchase cigarettes themselves since the cultural expectation of sharing cigarettes catered for their needs.\textsuperscript{20}

There are no national data on use of roll-your-own tobacco (‘rollies’) in the Aboriginal and Torres Strait Islander population, but it is likely that use among these groups would be at least similar to or possibly higher than levels among the total Australian population, in part due to its price advantage\textsuperscript{2} and possibly also because of its facility as a product for chewing, or for blending with cannabis (see Section 8.11.2). Watson et al found that more than a third of Indigenous smokers surveyed in Northern Territory communities smoked hand-rolled cigarettes in 1986–87.\textsuperscript{21} A 2008 cross-sectional survey in three Northern Territory communities reported that of 305 smokers aged 16 years and over, 57\% smoked both factory-made cigarettes and loose ‘roll-your-own’ tobacco, 34\% smoked factory-made cigarettes only, 2\% smoked only loose tobacco, and 1\% only chewed tobacco.\textsuperscript{15} In comparison, the National Drug Strategy Household Survey of 2007 found that about 17\% of Australian smokers used both roll-your-own tobacco and factory-made cigarettes, and only 5\% of all smokers used loose tobacco exclusively.\textsuperscript{5}

### 8.5.2 ‘Chop-chop’

Chop-chop is unbranded loose tobacco leaf, sold on the black market at less than half the price of properly taxed tobacco on a weight for weight basis.\textsuperscript{22} Most of its popularity results from its price, but it is also favoured by some due to the common misconception that because it has not undergone the usual manufacturing processes, it is has no additives and is less harmful to health.\textsuperscript{23,24}

The National Aboriginal and Torres Strait Islander Tobacco Control Project report found that people in Aboriginal and Torres Strait Islander communities in Queensland, New South Wales, the Australian Capital Territory, Victoria and Tasmania use chop-chop. Chop-chop is used among people in these communities for the same reasons that it is used among non-Indigenous Australians (i.e., its comparatively low price), but there are no data on the extent of its usage. As with other tobacco products, its use tends to be cyclical, peaking around pay days. Because chop-chop is generally sold in bulk quantities, it is often purchased communally.\textsuperscript{2}

For further information on chop-chop, refer to Chapter 1, Section 1.11.2, Chapter 3, Section 3.27.2, Chapter 13, Section 13.7.9.

### 8.5.3 Chewing tobacco

The national surveys of Aboriginal and Torres Strait Islander smoking behaviour have not reported separately on types of tobacco consumed, and all have excluded chewing tobacco. Information on the chewing of pituri and other bush tobaccos and commercially available loose tobacco comes from local studies, many of which are considerably dated. Studies indicate that prevalence of tobacco chewing is low among Aboriginal and Torres Strait Islander people, although it more common in some Central Australian communities (southern NT, northern SA, and eastern WA).

Only one large-scale study, undertaken in the Northern Territory between 1986 and 1987,\textsuperscript{21} attempted to quantify this form of tobacco use in the Indigenous population, finding that one-quarter of respondents chewed tobacco. Women were more likely to chew tobacco than men (38\% compared to 11\%), and it was more popular among older age groups of both sexes, with almost half of the population aged over 60 reporting that they chewed tobacco. The uptake of chewing occurred at an early age, with young girls being taught to chew by their mothers and grandmothers; however, this study is from the mid-1980s, and little is known about current uptake practices. Three-quarters of chewers used commercial loose flake or plug smoking tobacco, and one-quarter used bush tobacco. All chewers mixed their tobacco with ash, in the traditional manner (see Section 8.2). Only a small proportion of individuals (4\%) both smoked and chewed tobacco.\textsuperscript{21}

However, there was also a strong geographic influence on chewing behaviour. In the Top End region, tobacco was chewed by only 5\% of women and 1\% of males.\textsuperscript{21} More recent studies in Arnhem Land communities of the Top End have also reported low levels of chewing tobacco use. A 2008 study reported that only 1\% reported using chewing tobacco exclusively,15 and in a study from 2000, 7\% of current smokers (11 of 161) reported that they also chewed tobacco.\textsuperscript{25}

The rates of chewing tobacco are much higher in the central region of Australia. The 1986–87 NT study found that 61\% of women and 20\% of men chewed tobacco. Although there have been no recent large-scale studies measuring rates of use of chewing tobacco in Central Australia, one researcher has recently noted that more than 30\% of Aboriginal women giving birth at the Alice Springs Hospital regularly chew bush tobacco (pituri).\textsuperscript{26} Another study in remote South Australia has commented that chewing tobacco ‘is mainly practiced by middle aged and older women who are least likely to smoke’ (pS71).\textsuperscript{17} Given the potential health effects and addictiveness of chewing tobacco (see section 18.3.3), strategies to address tobacco use in the Central Australia region need to include both chewing and smoking, and need to consider that some people (particularly women) are exclusively chewing tobacco.
Studies in other parts of Australia have shown that tobacco chewing occurs at comparatively low levels. A study of smoking behaviour in two Victorian country towns showed that a very small number of Indigenous men (0.8%), and no women, chewed tobacco. In these populations, smoking was a majority behaviour (67% of men and 63% of women being current cigarette smokers). Another study on tobacco use among urban-dwelling Indigenous women aged 18 and over who attended an Aboriginal medical service in Perth found that 6% of respondents had chewed tobacco at some time, and of these women, just over half continued to chew regularly.

The 2002 National Aboriginal and Torres Strait Islander Tobacco Control Project provided anecdotal evidence that native tobaccos continued to be prepared according to traditional methods and played a valued role in ceremonies. Usage was more popular in remote areas, probably reflecting availability as well as historical patterns. Native leaf is sometimes mixed with commercially available loose-leaf tobacco, such as Drum or Log Cabin, or the commercial tobaccos are chewed on their own.

The health consequences of chewing tobacco in Indigenous communities have not been evaluated. However, more generally, smokeless tobacco products can cause addiction and a range of cancers, as well as adverse reproductive developmental effects including stillbirth, pre-term birth, and low birth weight. Some smokeless tobacco products are also associated with increased cardiovascular risks and type 2 diabetes. Chewing tobacco is associated with cancers of the lip, oral cavity and pharynx, and for Indigenous people in the Northern Territory the incidence of these types of cancers increased by 6.6% annually between 1991 and 2005, while mortality increased by 4.6% annually in the same time period. However, it is not possible to separate the causal role of tobacco use in these deaths from other possible contributing factors. An international review of smokeless tobacco use during pregnancy has found indications of an association with poorer birth outcomes, including increased rates of stillbirth and low birth weight. It is possible that chewing pituri has similar effects on birth outcomes. The historical and cultural elements of native tobacco use are, however, important to the communities in which their use has continued, and any future health campaigns dealing with chewing tobacco would need to be sensitively managed.

8.5.4 Pipe and cigar use

National surveys of Indigenous smoking behaviour have not collected separate data on pipe or cigar smoking. However it is likely that, as among the general Australian population, use of tobacco in these forms is minimal. The National Drug Strategy Household Survey of 2013 found that only about 1–2% of smokers aged 14 and over reported regular pipe or cigar use.

The historical associations of pipe use among Indigenous people, with are particularly strong in parts of Northern Australia, may mean that there are still communities with some levels of pipe smoking (see Section 8.2). Other than anecdotal comments, there does not appear to be any published information on this subject.


References


2. Lindorff KJ. Tobacco time for action: National Aboriginal and Torres Strait Islander tobacco control project final report. Canberra, Australia: National Aboriginal Community Controlled Organisations, 2002.


8.6 Smoking cessation and Aboriginal peoples and Torres Strait Islanders

Ex-smoking status

The most recent information on smoker status (including information on ex-smokers and never smokers) is reported in the 2012–13 National Aboriginal and Torres Strait Islander Health Survey. These prevalence rates, adjusted for age so that they are comparable to the non-Indigenous population, are reported in Figure 8.6.1. Further analyses of smoking status data by age, sex, and Indigenous status are shown in Figure 8.6.2.

Figure 8.6.1
Age-standardised smoker status, Indigenous and non-Indigenous persons 15 years and over, 2012–13

*Current smoker includes daily, weekly and other current smokers

Source: ABS 20141 using data from the National Aboriginal and Torres Strait Islander Health Survey 2012–13 and the 2011–12 Australian Health Survey

In 2012–13, from ages 25–34 and older, Indigenous males were significantly less likely to be ex-smokers than non-Indigenous males. For women, there was only a significant difference in ex-smokers among those aged 35–44. These patterns are shown in Figure 8.6.2.
In 2012–13, a nationally representative sample of 2522 Aboriginal and Torres Strait Islander people from 35 locations across Australia were interviewed, which formed the baseline data for the Talking About The Smokes (TATS) Project. The TATS project aimed to provide a comprehensive evidence base for guiding practice and policy to reduce tobacco-related harm among Indigenous Australians. Questions regarding past quit attempts revealed that compared with the general population, fewer Aboriginal and Torres Strait Islander daily smokers had ever tried to quit, but a similar proportion had attempted to quit within the past year (Figure 8.6.3). Of those who had tried to quit in the past year, similar proportions reported sustaining their most recent quit attempt for one month or more (Indigenous, 31% v non-Indigenous, 33%) and six months or more (Indigenous, 10% v non-Indigenous, 11.7%).

Reasons for quitting

A consistent theme in many studies of Indigenous smokers is the roles of families and communities in motivating cessation. In the TATS project, perceiving that local Aboriginal and Torres Strait Islander community leaders disapprove of smoking, believing non-smokers set a good example to children, and having support from friends and family were associated with wanting to quit. A 2010 national study investigating Indigenous smoking issues found that key motivators for smoking cessation were: the importance of family and kin, and the impact of smoking on them; supporting self-efficacy in the quitting process; the cost of smoking, particularly because it affects the family; and the adverse effects of smoking on sport and physical activity. Similarly, a qualitative study in 2008 found that the health and wellbeing of Indigenous people’s families was particularly important in motivating quit attempts; smokers cited protecting their children and family from the health consequences of secondhand smoke, acting as positive role models to their children, reducing the negative social and economic impacts that smoking was having on their family, and maintaining good health to fulfil their family responsibilities as reasons to quit smoking.

Health concerns are also important determinants of cessation among Indigenous Australians. Participants in the TATS project cited worrying about future smoking-related health effects and believing quitting to be beneficial as reasons for wanting to quit. The National Aboriginal and Torres Strait Islander Tobacco Control Project (2001) found that among those who had successfully quit smoking, a main motivator was either suffering an illness or being diagnosed with a serious illness. Other reasons for quitting included wanting to live long enough to see their grandchildren grow up, a personal wish to quit, seeing others suffer sickness or dying from tobacco-related illnesses, the cost of tobacco, and their children asking them to give up. Quitters were more likely to have quit at a relatively early age (25 or younger). Half of quitters had done so ‘cold turkey’. Western Australian research on the smoking habits of urban Indigenous women found that of those who had quit smoking, health concerns were cited as the main reason (49%), followed by pregnancy (12%). Similarly, motivators for quitting among a group of young urban Aboriginal South Australians included pregnancy and/or children and health reasons, as well as cost issues and sporting performance (for males).

Barriers to quitting

Research in 1999 evaluating the National Tobacco Campaign (1997–98) found that quitting was perceived as a very difficult goal among Indigenous people in Victoria, and the combination of smoking being strongly embedded in community norms, peer expectation to smoke, and the concomitant lack of social support for quitting discouraged quitting (see Section 8.9.1). Recent research has also found that perceiving quitting as very difficult is associated with being less likely to want to quit, as is enjoying smoking. Along with being an important motivator for quitting, families can also play a central role in initiation to smoking and maintaining the habit (see Section 8.9). In the National Aboriginal and Torres Strait Islander Tobacco Control Project (2001), the reasons most commonly given for returning to smoking after an attempt at quitting were succumbing to peer or family influences, stress, and addiction. The authors of a Western Australian study highlight that one of the key functions of smoking among urban Indigenous women is its role as a facilitator of friendship bonding and social cohesiveness. This strongly reinforces smoking behaviour and perceptions, and undermines likelihood of quitting, since to give up smoking is to risk social isolation and alienation.

Barriers to quitting among pregnant women

Smoking by Aboriginal and Torres Strait Islander women during pregnancy remains high (see Section 8.3), and several studies have investigated smoking behaviours in this group. In 2012, 11.6% of Aboriginal and Torres Strait Islander women who smoked during the first 20 weeks of pregnancy reported not smoking during the second 20 weeks of pregnancy, which was half that of non-Indigenous women (22.9%). Between 2005 and 2011, there was a statistically significant decline (of 6%) in smoking during pregnancy among Indigenous women, but this drop was much greater among non-Indigenous women (25%).

Studies have found that women may report cutting down the number of cigarettes smoked in an attempt to limit risk to their baby. In a New South Wales study, 24% of women using tobacco at the beginning of their pregnancy quit, while about 51% decreased their tobacco use (13% stayed the same, and 12% increased their use). Among those who quit, a significant proportion may take up smoking again after the birth of the baby. A qualitative study in 2013 found that Indigenous women in NSW were aware of the dangers of smoking, felt guilty about smoking while pregnant, and tried to change their smoking behaviour, with many contemplating quitting; however, due to the difficulty of quitting, reducing consumption was more common. There is some evidence that reducing consumption to fewer than eight cigarettes per day can improve birthweight and reduce preterm
Barriers to quitting among health workers

Studies on tobacco use among Aboriginal health workers have found that the majority of Aboriginal health workers wanted to quit, and/or had made at least one quit attempt in the recent past.6,24-26 A 2013 study of Aboriginal health workers in South Australia found that among current smokers (just over half the total sample), half had tried to quit in the past year, and over two-thirds described a readiness to quit. Successful quitters (about one quarter of the total sample) had the highest levels of perceived social support and part-time employment. Current smokers expressed lower emotional wellbeing compared with quitters and never smokers, and three times as many lived with another smoker.27 The TATS study found that staff of Aboriginal community-controlled health services who were smokers were more likely than smokers in their communities to have ever tried to quit, to have often noticed antismoking advertising, and to have used stop smoking medications, often with the support of their workplace. Ex-smokers were most likely to report being confident in talking to others about smoking and quitting. About three-quarters of smokers agreed that being a non-smoker sets a good example to patients, and most did not smoke with, or in front of, patients.28

Releasing stress, particularly stress associated with the job, is commonly cited as a reason for Aboriginal health workers to smoke.5,26-29 In a qualitative study in 2012, Aboriginal Health Workers described work stress and grief as leaving them unable to prioritise quitting smoking. (However smoking appears to increase stress, while quitting is associated with reduced stress—see Section 7.12.3). More broadly, the normalisation of smoking in Indigenous communities was an overarching barrier to cessation; smoking was often part of the workplace culture, and there were a lack of smokefree places and policies.28 Other barriers that have been reported are a lack of support, living/working in environments where smoking is common, having a partner who smokes, addiction, and withdrawal when trying to quit.26 Smoking among Aboriginal health workers may affect their capacity to deliver smoking cessation activities (see Section 8.10.5). Specific tobacco action programs targeting Aboriginal health workers are discussed in Section 8.10.13.1.

Smoking cessation behaviour among young Aboriginal and Torres Strait Islanders is discussed in Section 8.4. Attitudes and beliefs about smoking are discussed further in Section 8.9, and initiatives and policies designed to promote and support quitting among Aboriginal peoples and Torres Straits Islanders are discussed in sections 8.10 and 8.13 respectively. Smoking cessation is discussed in greater detail in Chapter 7.

References

4. Ipsos-Eureka Social Research Institute and Winangali, Developmental research to inform the national action to reduce smoking rates social marketing campaign. Prepared for the Lindorff KJ. Tobacco time for action: National Aboriginal and Torres Strait Islander tobacco control project final report. Canberra, Australia: National Aboriginal Community Controlled Organisations, 2002.


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8.7 Morbidity and mortality caused by smoking among Aboriginal peoples and Torres Strait Islanders

This section discusses the major tobacco related disease groups leading to illness and death among Australia's Aboriginal peoples and Torres Strait Islanders, and highlights differences, where they occur, from the general Australian population. The health consequences of smoking are discussed in detail in Chapter 3. National figures on morbidity and mortality due to smoking are provided in Chapter 3, Section 3.30.

The majority of national data appearing in this section comes from two main sources: the Australian Institute for Health and Welfare’s National Mortality Database as analysed and reported in the 2015 edition of The Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples; and analysis of 2003 morbidity and mortality data in The Burden of Disease and Injury in Aboriginal and Torres Strait Islander Peoples, 2003. It should be noted that in many cases what is reported as ‘national’ data is actually data from those jurisdictions where Indigenous data quality is considered adequate. This varies among data sets and is specified where necessary.

8.7.1 Causes of mortality and morbidity among Aboriginal peoples and Torres Strait Islanders

Aboriginal peoples and Torres Strait Islanders experience poorer health outcomes and have a lower life expectancy than the rest of the Australian population—10.6 years lower for men, and 9.5 years lower for women (2010–2012 data). Between 2005–2007 and 2010–2012, the life expectancy gap between Indigenous and non-Indigenous Australians is estimated to have narrowed by 0.8 years for men and 0.1 years for women. For the period 2008–2012, 65% of deaths among Indigenous people occurred before the age of 65, compared with 19% of deaths among non-Indigenous people. The mortality rate for Indigenous people was 1.6 times that of non-Indigenous people (age-standardised rates of 981 and 596 deaths per 100,000, respectively). The largest difference in mortality rates were for people aged 35–44, with male and female Indigenous death rates 3.9 and 4.5 times the non-Indigenous rates, respectively. Over this period, infant deaths represented 4.2% of Indigenous deaths, compared with 0.8% of non-Indigenous deaths. Between 1998 and 2012, the gap in infant mortality rates (i.e., deaths of children under one year old) narrowed by 83%; for Indigenous infants, it fell by 64% (from 13.5 to 5.0 deaths per 1,000 live births), while it fell by 25% for non-Indigenous infants (from 4.4 to 3.3 per 1,000 live births).

For the period 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined, 75% of deaths among Indigenous people aged 0–74 years were from avoidable causes (i.e., deaths from conditions that could either be prevented from occurring at all, or that could be avoided with early diagnosis and effective treatment), compared with 66% of non-Indigenous deaths in the same age group. Aboriginal and Torres Strait Islander peoples died from all avoidable causes at three times the rate of non-Indigenous Australians; although, encouragingly, there was a 27% decline in the avoidable mortality rate for Aboriginal and Torres Strait Islander peoples in the period 1998 to 2012, and a significant narrowing of the gap. Chronic disease and injury are responsible for the greatest proportion of avoidable Indigenous deaths, and are responsive to both prevention and treatment.

In 2010–2012, the leading broad cause of death among Aboriginal peoples and Torres Strait Islanders was cardiovascular disease (CVD), accounting for about 25% of all Indigenous deaths. Indigenous people died from CVD at 1.5 times the rate of non-Indigenous people in 2008–2012, and it was responsible for nearly one-quarter of the mortality gap. The next most common cause of death among Indigenous people was cancer (20%, with lung cancer accounting for 4.9% of such deaths), followed by external causes of injury and poisoning (15%), endocrine, metabolic and nutritional disorders (including diabetes; 9.1%), respiratory diseases (7.6%), and digestive diseases (5.6%). Table 8.7.1 shows the leading specific causes of death for both Indigenous and non-Indigenous people.
Aboriginal peoples and Torres Strait Islanders also have higher overall hospitalisation rates than the non-Indigenous population, despite likely under-reporting of Indigenous separations in hospital statistics. Adjusting for age, in 2012–13 Indigenous people were 2.3 times more likely than non-Indigenous people to be admitted to hospital. Eighty-four per cent of this difference was due to the substantially higher rates of care involving dialysis among Indigenous Australians (which accounted for 45% of hospitalisations; Indigenous Australians were 10 times as likely as non-Indigenous Australians to be hospitalised for chronic kidney disease). Excluding dialysis, the hospitalisation rate for Indigenous people was 1.2 times the rate for non-Indigenous people. The next most common reasons for hospitalisation were injury and poisoning (7.2%) and pregnancy and childbirth (5.8%). The potentially preventable hospitalisation rate (i.e., hospitalisations that might have been prevented through the timely and appropriate provision and use of population health services, primary care or other non-hospital services) for Indigenous people was 3.4 times the rate for non-Indigenous people.

A 2007 study analysed mortality and morbidity data from 2003 to assess the ‘burden of disease’ of various conditions for Indigenous people. The ‘burden of disease’ incorporates measures of both mortality (years of life lost due to premature death), and morbidity (years lived with disability), and is expressed in terms of disability-adjusted life years (DALYs). Table 8.7.1 shows the leading causes of DALYs for Indigenous males and females and the rate ratios compared to the total Australian population. In 2003, ischaemic heart disease, type 2 diabetes and anxiety and depression were the top three contributors to the burden of disease for Indigenous males, while for Indigenous females, the leading causes of burden were anxiety and depression, type 2 diabetes and ischaemic health disease. For males, differences between Indigenous and non-Indigenous disease burdens were greatest for homicide and violence (6.8 times the rate), ischaemic heart disease (5.1 times), and type 2 diabetes (4.6 times). For females, these differences were greatest for homicide and violence (11.0 times), alcohol dependence and harmful use (7.9 times), and pneumonia (6.8 times).

### Table 8.7.2
Rate ratios of top 12 leading causes of DALYs by sex, comparing Indigenous Australian and total Australian populations, 2003

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<th>Females</th>
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<td>Condition</td>
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<tr>
<td>2</td>
<td>Type 2 diabetes</td>
<td>7.0</td>
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<tr>
<td>3</td>
<td>Anxiety &amp; depression</td>
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</tr>
<tr>
<td>4</td>
<td>Suicide</td>
<td>5.3</td>
</tr>
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<td>5</td>
<td>Road traffic accidents</td>
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</tr>
<tr>
<td>6</td>
<td>COPD</td>
<td>3.9</td>
</tr>
<tr>
<td>7</td>
<td>Alcohol dependence &amp; harmful use</td>
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<tr>
<td>8</td>
<td>Asthma</td>
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</tr>
<tr>
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* The rate ratio compares the rates of DALYs per 1000 people for the Indigenous Australian population to the total Australian population. For the purposes of this comparison, the total Australian population has been age standardised to the total Indigenous Australian population, 2003.
8.7.2 Tobacco-related causes of mortality and morbidity among Aboriginal peoples and Torres Strait Islanders

An analysis of 2003 data related to death and illness among Indigenous people calculated ‘the burden of disease’ related to specific health conditions and to 11 risk factors for health, including tobacco smoking. Of the 11 risk factors, tobacco smoking accounted for 12.1% of the burden of disease, more than any of the other risk factors, and more than for alcohol and illicit drugs combined. The contribution of tobacco to the total burden of disease was six times greater for Indigenous than non-Indigenous people. Further analysis found that of the death and disability (measured by DALYs) attributable to tobacco, three-quarters was accounted for by ischaemic heart disease (37%), chronic obstructive pulmonary disease (COPD; 21%) and lung cancer (15%). Stroke accounted for 9% and low birthweight for 5% of DALYs attributable to tobacco. Most (three-quarters) of the burden attributed to tobacco smoking was from mortality. Tobacco contributed to 33% of death and disability from cardiovascular disease, and to 35% of the burden of disease associated with cancer. A greater proportion of the DALYs from cancer was attributable to tobacco in the Indigenous population than in the non-Indigenous population (35% vs. 21%). Overall, this study found that tobacco smoking accounts for 20% of deaths among Indigenous Australians, and for 17% of the health gap (measured in terms of adjusted DALY rates) between Indigenous and non-Indigenous populations.

It has been estimated that if all tobacco-caused deaths among Indigenous Australians could be eliminated, then average life expectancy would increase by 2.5 years for males and 1.7 years for females. While this may not seem very much, it is important to note that this estimate is averaged across the entire Indigenous population, smoker and non-smoker. If applied only to smokers it would be considerably greater.

Two earlier studies also attempted to quantify deaths due to smoking among Indigenous people. These were conducted in the Northern Territory (1986–1995) and Western Australia (1983–1991). Although there are methodological weaknesses and the findings should not be generalised to the total Indigenous population, the studies provide some indication of the health impact of tobacco among Australia’s Indigenous peoples. The two reports are in broad accordance with each other and with the national data reported above.

The Northern Territory study (1986–1995) found that smoking caused 23% of deaths among Indigenous males, and 17% of deaths among Indigenous females. In the non-Indigenous Northern Territory population, 22% of male deaths and 11% of female deaths were attributable to smoking. Although there was no regional variation among deaths due to smoking in the non-Indigenous population, regional differences in Indigenous smoking patterns (see also Section 8.3.1), meant that Indigenous people in the ‘Top End’ of the Northern Territory were more likely to die from disease caused by smoking compared to those living in the centre. Most deaths due to smoking were caused by COPD, ischaemic heart disease, lung cancer, stroke, pneumonia and oropharyngeal cancer. Adjusting death rates to take into account differences in age distribution within the Indigenous compared with the non-Indigenous populations, the Northern Territory report found that Indigenous women had an age-adjusted smoking attributable death rate of 251 per 100,000, more than six times higher than that of non-Indigenous women (38 deaths per 100,000). The rate for Indigenous males was more than three times higher than that of their non-Indigenous counterparts (457 per 100,000 compared to 145 per 100,000).

The Western Australian study (1983–1991) estimated that tobacco use caused 13% of all deaths among Aboriginal people, compared to 16% of all deaths in the Western Australian population. Ischaemic heart disease was the leading cause of death, followed by lung cancer and chronic bronchitis. Indigenous women died at almost four times the rate of non-Indigenous women (118 deaths per 100,000 compared to 32 per 100,000) and Indigenous men died from tobacco-caused illness at nearly two-and-a-half times the rate of non-Indigenous men (271 deaths per 100,000 compared to 113 per 100,000).

Both reports note that death rates for tobacco-caused diseases increased substantially at an earlier age among Indigenous people than for non-Indigenous people. The Northern Territory study noted that increases in tobacco-caused morbidity occurred from 35 years of age compared with 45 years of age, the Western Australian report found that nearly half of all tobacco-caused deaths occurred before the age of 55 in the Indigenous population, compared to only about 11% of deaths in the non-Indigenous population.

Data from the Australian Institute of Health and Welfare’s National Hospital Morbidity Database shows that Indigenous people are substantially more likely to be hospitalised due to illness caused by tobacco. In 2006–07 to 2007–08, Indigenous Australians had four times the rate of hospitalisations with a principal diagnosis related to tobacco use as non-Indigenous Australians. Although Indigenous males had a slightly higher rate of tobacco-related hospital encounters than Indigenous females, the difference between Indigenous and non-Indigenous hospitalisations was greater for females than males. While Indigenous males were admitted to hospital at 3.2 times the rate for non-Indigenous males, Indigenous women had 5.1 times the admission rate of non-Indigenous women. Similarly high rates have been found in earlier studies in the Northern Territory (1993–1995) and Western Australia (1983–1991).

Another measure of morbidity is through self-reported health status. The 2002 and 2008 National Aboriginal and Torres Strait Islander Social Surveys and the 2004–05 National Aboriginal and Torres Strait Islander Health Survey provide useful data to compare the self-reported health status and health conditions of smokers versus non-smokers. In each of these surveys, Indigenous Australians who reported poorer health status than those who did not smoke. In 2008, of those who had never...
smoked, 53% reported excellent/very good health and 16% reported fair/poor health; in contrast, among current smokers, 39% reported excellent/very good health while 25% reported fair/poor health.\textsuperscript{10} In comparison to Aboriginal peoples and Torres Strait Islanders who had never smoked, those who were daily smokers were more likely to report:

- high/very high levels of psychological distress: 32% compared with 20% (2004–05 National Aboriginal and Torres Strait Islander Health Survey)
- having a disability or long-term health condition: 40% compared with 31% (2002 National Aboriginal and Torres Strait Islander Social Survey)
- having a profound or severe core activity restriction such as self-care, mobility or communication: 9% compared with 6% (2002 National Aboriginal and Torres Strait Islander Social Survey).\textsuperscript{12}

However, among Indigenous people aged 35 years and over, similar proportions of current daily smokers (89%), ex-smokers (94%) and never smokers (90%) reported having at least one long-term health condition (2004–05 National Aboriginal and Torres Strait Islander Health Survey ).\textsuperscript{12}

### 8.7.3 Diseases and conditions related to smoking

As described above, tobacco is a causal, contributing or complicating factor in many of the disease processes contributing most to death and disability among Indigenous people. This sub-section considers the specific diseases and conditions related to smoking: cardiovascular diseases, cancers, respiratory diseases, diabetes, and pregnancy-related conditions.

#### 8.7.3.1 Circulatory diseases

In 2012–13, 13% of Indigenous Australians aged two and over reported having cardiovascular disease (CVD; a broad term for a range of diseases affecting the heart and blood vessels), and it was the leading cause of death among Aboriginal peoples and Torres Strait Islanders, accounting for 25% of all deaths.\textsuperscript{1} The leading specific causes of CVD deaths were ischaemic heart disease (55%), followed by cerebrovascular causes such as stroke (17%).\textsuperscript{3} Smoking increases the risk for each of these conditions.\textsuperscript{13} CVD was also responsible for the largest percentage (24%) of the mortality gap between Indigenous and non-Indigenous people in 2008–2012; however, between 1998 and 2012, there was a 40% decline in age-standardised death rates due to CVD for Indigenous people, and a 43% decline in the mortality gap. This has been largely due to decreases in deaths from coronary heart disease and cerebrovascular disease.\textsuperscript{1}

The high prevalence of smoking, diabetes, obesity and sedentary lifestyle, high blood pressure and cholesterol, and poor nutrition in the Aboriginal and Torres Strait Islander populations contributes to the incidence of cardiovascular diseases in their communities. National\textsuperscript{5} and regional\textsuperscript{14–17} studies have shown a high incidence of multiple risk factors for heart disease among the Indigenous population, especially smokers.\textsuperscript{12} In 2004–05, 30% of current smokers and 37% of former smokers reported having heart or circulatory disease.\textsuperscript{12}

#### 8.7.3.2 Cancers

State and national cancer data sets consistently show that the incidence rates among Indigenous Australians for all cancers combined are similar or lower than for other Australians. The Australian Institute of Health and Welfare’s 2014 report on cancer in Australia indicated that between 2005 and 2009, the age-standardised incidence rate of all cancers combined was 421 per 100,000 for Indigenous Australians, compared with 443 per 100,000 for their non-Indigenous counterparts.\textsuperscript{18} However, certain types of cancers have higher incidence rates, and for many cancers higher mortality rates have been reported for Indigenous people.\textsuperscript{5,19–23} In this time period, lung cancer was the most commonly diagnosed cancer among Indigenous Australians, followed by breast cancer in females, colorectal cancer, and prostate cancer.\textsuperscript{18} The age-standardised incidence rate was significantly higher for Indigenous than for non-Indigenous Australians for liver cancer (2.8 times as high), cervical cancer (2.3), cancer of unknown primary site (1.8), lung cancer (1.7), uterine cancer (1.6), reflecting Indigenous peoples’ higher rates of smoking and heavy drinking, poorer access to healthcare services, and lower participation in national screening programs (for cervical cancer, which smoking is also a risk factor for).

Analysis of combined data from the cancer registries of South Australia, the Northern Territory and Western Australia\textsuperscript{22} also shows that lung cancer is the most commonly diagnosed cancer for Indigenous people (74.8 per 100,000)—1.6 times the rate of non-Indigenous people (47.1 per 100,000). Lip/mouth/pharynx cancer occurs at twice the rate for Indigenous people compared to non-Indigenous people (30.9 per 100,000 compared to 15.2 per 100,000). Alcohol use can also cause these and other diseases, and when combined with smoking, acts synergistically to greatly increase the incidence of cancers of the oral cavity, oesophagus and larynx.\textsuperscript{24} Alternatively, some cancers had lower incidence rates among Indigenous Australian (colorectal, breast, non-Hodgkin lymphoma, and prostate), perhaps due to a higher likelihood of being diagnosed at a later stage, when the primary cancer site is no longer apparent. Screening for breast and bowel cancer, and testing for prostate cancer, is also lower among this population, which
may lead to lower rates of diagnosis. Further, although still lower than for the non-Indigenous population, rates of lymphoma and colorectal cancer increased significantly between 1998 and 2005; in 1998 the Indigenous incidence rate for both cancers was about half that of the non-Indigenous rate, but by 2005 the Indigenous incidence had risen to be only about 20% less than the non-Indigenous rate.

Between 2008 and 2012, the age-standardised mortality rate of all cancers combined was significantly higher for Indigenous Australians (221 per 100,000) than for their non-Indigenous counterparts (172 per 100,000). This difference may be due to Indigenous Australians’ higher likelihood of being diagnosed with cancers with poor prognoses (e.g., lung cancer and cancer of unknown primary site) or of being diagnosed at an advanced stage, and being less likely to receive adequate treatment. Lung cancer was responsible for the most cancer deaths (25%) among Indigenous Australians, followed by liver cancer (7%), breast cancer in women (6%) and cancer of unknown primary site (6%). Adjusting for age, the mortality rate was significantly higher for Indigenous Australians for cervical (3.4 times), liver (3.0), lung (1.7), and cancer of unknown primary site (1.5) than for non-Indigenous Australians. Earlier data showed that the comparative death rates from lung cancer and lip/mouth/pharynx cancers are higher for Indigenous people than non-Indigenous people. Data from the Northern Territory also show that while lung cancer declined in incidence and mortality among non-Indigenous Territorians and Indigenous women between 1991 and 1995 and 2001 and 2003, there was little reduction among Indigenous males (among whom smoking rates are highest). These poorer outcomes are suggestive of shortcomings in health services available to these communities, and may also reflect language and cultural barriers.

8.7.3.3 Respiratory diseases
Aboriginal and Torres Strait Islander people experience significantly higher rates of respiratory diseases including asthma, chronic obstructive pulmonary disease (COPD), and pneumonia, all of which are directly caused by smoking. In 2008–2012, respiratory diseases were the fifth leading cause of death among Indigenous Australians, and such diseases were responsible for 12% of the mortality gap. Fifty-three per cent of respiratory deaths among Indigenous Australians were attributed to COPD, 4% to asthma and 19% to pneumonia and influenza. As with cardiovascular disease, death rates from respiratory diseases declined significantly between 1998 and 2012 (by 26%) for Indigenous people, with a significant closing of the gap of 39%.

In the Indigenous population in 2004–05, 34% of current smokers and 37% of ex-smokers aged 35 and over reported that they had a respiratory disease. Other contributing factors to respiratory and lung disease include living in dusty regions, or exposure to smoke from wood fires. These environmental factors may also be responsible for influencing disease rates in some Indigenous communities.

8.7.3.4 Diabetes
Diabetes is a chronic condition in which blood glucose levels become too high due to the body producing little or no insulin, or being unable to use insulin properly. As well as being life threatening in its own right, diabetes mellitus (also known as type 2 diabetes) can lead to a range of other serious health problems, including coronary heart disease, stroke, peripheral vascular disease, kidney disease, eye disease, and complications in pregnancy and childbirth. The 2014 US Surgeon General’s report concluded that smoking is a cause of diabetes. Smokers with diabetes are also at increased risk of illness and premature death, mainly through the development of cardiovascular disease in its various forms. Being overweight, having an unbalanced diet and lack of physical activity are major risk factors for developing diabetes, and each is more common in the Indigenous than the non-Indigenous population, and among Indigenous smokers than Indigenous non-smokers.

In 2012–13, 11% of Indigenous Australians aged 18 years and over had diabetes, while an additional 4.7% were at risk of developing diabetes. After adjusting for age, Indigenous adults were 3.3 times as likely to have diabetes as non-Indigenous adults. In 2008–2012, diabetes was the second leading specific cause of death among Indigenous people (accounting for 7.9% of deaths), and was an associated cause of death for an additional 12.3% of Indigenous deaths. It was either an underlying or associated cause of death in 1 in 5 Indigenous deaths (3.9 times the rate of non-Indigenous people), and was the second leading cause of the mortality gap, with no significant improvements in mortality rates for Indigenous people for diabetes between 1998 and 2012. National data show that in 2004–05, more than 1 in 10 (13%) of Indigenous people aged 35 or more who were current smokers reported having diabetes or high sugar levels. Ex-smokers were twice as likely to report having diabetes or high sugar levels compared with current smokers. Ex-smokers with diabetes or high sugar levels were also twice as likely to be overweight or obese compared with smokers with the same conditions, possibly reflecting quitting behaviour following diagnosis.

8.7.3.5 Smoking in pregnancy, and maternal and child health outcomes
As noted in Section 8.3 and 8.6, national and state data and local-level studies show that Indigenous women have a higher prevalence of smoking during pregnancy and after giving birth than non-Indigenous women. Smoking in pregnancy is a major risk factor for preterm delivery, complications in childbirth, foetal growth restriction, stillbirth, low birthweight and infant mortality. In 2011, newborns of Indigenous mothers were twice as likely to be of low birthweight compared with newborns of non-Indigenous mothers. Infants who are born small for their gestational age are more likely to suffer a range of
adverse health outcomes including having an impaired immune system, increased mortality and ill-health in infancy, and subnormal growth patterns.\textsuperscript{36} Smoking is also a cause of sudden infant death syndrome, whether the baby has been exposed to smoking before birth or in the home following birth.\textsuperscript{24} Long-term effects of smoke exposure during pregnancy may include poorer academic performance, lower final attained height, and a lower likelihood of employment in managerial or professional fields, even after adjusting for social class and other confounding factors.\textsuperscript{37} On this basis, it can be said that maternal smoking in pregnancy may be damaging to the health of at least two generations.\textsuperscript{38}

Poorer health outcomes in pregnancy—low birthweight, premature birth, and stillbirth or death in the first four weeks of life (perinatal deaths)—are more prevalent among Aboriginal and Torres Strait Islander women than non-Indigenous women.\textsuperscript{5,39} Over the period 2008–12, the average perinatal birth rate of babies born to Aboriginal or Torres Strait Islander mothers was about 9.6 per 1,000 births compared with 8.1 per 1,000 births for non-Indigenous babies. Rates among Indigenous women varied substantially by state/territory, from 3.7 deaths per 1,000 Indigenous births in SA, to 18 per 1,000 births in the NT. Overall, the rate decreased by about 52% between the years 1998 and 2012, and by a larger amount in Indigenous than in non-Indigenous Australians, leading to a significant decrease in the gap.\textsuperscript{3} Medical care improvements such as access to hospital birthing facilities, improved neonatal and paediatric care, and the establishment of pre-natal screening for congenital abnormalities have likely contributed to this decrease.\textsuperscript{40} The two main causes of death among Indigenous infants were certain perinatal conditions such as birth trauma, disorders related to foetal growth, and complications of pregnancy, labour and delivery (48% of infant deaths), followed by symptoms, signs and ill-defined conditions (19% of infant deaths, mainly from sudden infant death syndrome, or SIDS). The risks of both these categories of problems are elevated by smoking during pregnancy. Other than smoking, factors that affect maternal and child health outcomes include socio-economic circumstances, access to healthcare facilities, and the mother’s age during pregnancy.\textsuperscript{41} Indigenous mothers are on average younger than their non-Indigenous counterparts, and are more likely to be disadvantaged.\textsuperscript{5}

A limited number of studies have specifically looked at birth outcomes in relation to smoking during pregnancy among Aboriginal and Torres Strait Islander mothers. A South Australian study concluded that about 20% of preterm births, 48% of babies being born small for their gestational age, and 35% of babies with low birthweight could be attributed to smoking in this population group. Among non-Indigenous babies, 11% of preterm births, 21% of babies small for gestational age and 23% with low birthweight could be attributed to maternal smoking.\textsuperscript{38} A Queensland study investigating the effect of smoking on preterm births and low birthweight found that both Indigenous and non-Indigenous smokers had poorer birth outcomes than non-smokers; there was no significant difference in birth outcomes between Indigenous and non-Indigenous smokers.\textsuperscript{42} Other studies of Indigenous birth outcomes have found significant associations between smoking and small for gestational age,\textsuperscript{43} low birthweight,\textsuperscript{44} and ‘poor birth outcomes’ (low birthweight and/or preterm).\textsuperscript{45} A Western Australian study found that the risk of sudden infant death syndrome for babies born to Indigenous mothers who smoke is nearly three times greater than for babies of non-smoking Indigenous women.\textsuperscript{46} An analysis of 2009–11 perinatal data found that, excluding pre-term and multiple births, smoking was responsible for 51% of low birthweight births to Indigenous mothers, compared with 19% for non-Indigenous mothers. After adjusting for a range of demographic factors, it was estimated that the proportion of low birthweight babies could be reduced by about one quarter if the smoking rate among Indigenous pregnant women was the same as it was for non-Indigenous mothers. Babies born to Indigenous mothers who smoked were 1.4 times as likely to be pre-term as those who did not smoke.\textsuperscript{3} Research in Queensland found that, after excluding pre-term and multiple births, 76% of Indigenous mothers who gave birth to a low birthweight baby reported smoking during pregnancy.\textsuperscript{47}

See also Chapter 1, Section 1.10.1, and Chapter 9, Section 9.5.2.

### 8.7.4 Exposure to secondhand smoke and its health effects

Secondhand tobacco smoke is also a health concern. Babies and children living in a smoky environment experience higher rates of sudden infant death syndrome, exacerbation of asthma, a greater risk of developing acute lower respiratory tract infections such as bronchitis and pneumonia, and increased risk of middle ear infections. Adults exposed to secondhand smoke are more likely to develop a range of diseases including coronary heart disease, lung cancer and other respiratory problems.\textsuperscript{48} The health risks from exposure to secondhand smoke are discussed in detail in Chapter 4.

In 2014–15, about 58% of Indigenous children aged 0–14 lived with a daily smoker: a significant decrease from 63% in 2008. About 13% of Indigenous children lived with someone who smoked inside the home. These proportions increased with remoteness, such that Indigenous children in remote areas were significantly more likely to live with a daily smoker, and to live with a daily smoker who smoked indoors, than those in non-remote areas. Data from 2012–13 showed that Indigenous children were five times more likely than non-Indigenous children to live with a daily smoker who smoked inside the home (16% vs. 3% of non-Indigenous children).\textsuperscript{1} In terms of older children and adults, 60% of Aboriginal and Torres Strait Islander people aged 15 years and over were living in a household in which there was at least one daily smoker in 2014–15, down from 68% in 2008. Almost one in five (19%) were living in a household in which someone smoked inside.\textsuperscript{49}

Aboriginal and Torres Strait Islander women are more likely than non-Indigenous women to be exposed to secondhand smoke during pregnancy, and this may impact on birth outcomes. A study of pregnant Aboriginal women in Western Australia reported an association between exposure to secondhand smoke and an increased risk of having low birthweight and/or preterm babies.\textsuperscript{45} Similarly, a 2015 study detected serum cotinine (which indicates exposure to cigarette smoke) in just over half of a sample of pregnant Indigenous women, and this was negatively associated with birth weight and gestational age at delivery.\textsuperscript{50} In a study of
maternal smoking in the Northern Territory. 31% of the households of the pregnant participants included people who smoked inside during the pregnancy. Importantly, the birth of the child was associated with many of these households becoming smokefree indoors, with 12% reporting smoking indoors at one month after the birth, and 16% at seven months. In a 2013 qualitative study, Indigenous participants described avoiding smoking if children were present, and often limited the household areas where they smoked in an attempt to protect babies and children. Some also reported showering or changing clothes after having a cigarette.

Smaller regional studies have also reported that babies born to Indigenous families are significantly more likely to be exposed to secondhand tobacco smoke in the home than non-Indigenous babies. Research from Western Australia found that 80% of Indigenous babies in a sample studied in Perth were regularly exposed to tobacco smoke. A study from Queensland found that 40% of Indigenous infants were exposed to smoke in the home, compared to 20% of non-Indigenous babies. Research from three remote top end (north Northern Territory) communities reported that 98% of Indigenous primary or high school-aged children lived with at least one smoker, and 43% lived with five or more smokers. Indigenous children have more than three times the incidence of ear and hearing problems of non-Indigenous children, for which secondhand smoke is likely to be at least partially responsible. A Western Australian study found that exposure to secondhand smoke was a significant predictor of otitis media (middle ear infection) in Aboriginal children, which is common and frequently severe in Indigenous children, and is likely one of the key determinants of the high rates of disability and learning difficulties among this population.

The comparatively high smoking rates among Indigenous adults mean that many Aboriginal and Torres Strait Islander children live in households where smoking is the norm, which is not only likely to affect their health, but also their own attitudes to smoking (see Section 8.4.3).

References


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8.8 Economic issues relating to tobacco use among Aboriginal peoples and Torres Straits Islanders

Section 8.7 reviewed the serious health effects of tobacco use for Aboriginal peoples and Torres Strait Islanders, but tobacco also has a broader economic impact on these communities. Research undertaken by the National Aboriginal and Torres Strait Islander Tobacco Control Project in 2001 included information on the financial effects of tobacco use in a wide number of communities throughout Australia. This report found that expenditure on tobacco represented a significant proportion of family income among households with one or more smokers, and that purchases of tobacco were perceived as a priority, if necessary at the expense of food and other essentials. Tobacco consumption varied with stages in the pay cycle. As available funds declined, many reported using 'chop-chop' (unbranded loose 'black market' tobacco), or buying roll-your-own tobacco, cheaper cigarette brands and sharing packs. Some resorted to recycling cigarette butts into roll-your-own cigarettes. Smokers compensated for the lean times by smoking more heavily following pay day.

Other research has supported the finding that tobacco purchases are more likely to claim a disproportionate allocation of household expenditure in Indigenous households. One study in five remote central Australian communities estimated that between 12.7% and 9.1% of the maximum $453.30 per fortnight unemployment allowance (at the time) for a single person was being spent on cigarettes. In a Northern Territory Indigenous community, cigarette purchases accounted for 22% of money spent in local retail outlets, compared with the estimated 8% spent on tobacco products by households in the poorest income quintile nationally.

The National Aboriginal and Torres Strait Islander Tobacco Control Project also found that pricing tobacco beyond the means of individual smokers did not completely halt their access to the product, since the cultural obligation to share goods if requested means that it is likely that smokers who do have tobacco will be prevailed upon to share it. This in itself caused increased stress in some communities, interviewees reporting discomfort at high levels of 'humbugging' and 'hassling' for cigarettes or for the money with which to buy them. Young people put pressure on the elders to provide cigarettes, who in turn felt obliged to supply them. Some also reported episodes of coercion and intimidation. At worst, there have been reports of burglaries, violence, and threats of self-harm in order to obtain tobacco. A study in remote communities in Central Australia has explained the relatively low consumption levels there in terms of access and cultural obligations to share. The remote location and limited store opening times limit access. Furthermore, the cultural obligation to share means that full packs are generally not exclusively smoked by the purchaser but are given to others. This obligatory sharing means that many smokers will not smoke large amounts of cigarettes, but it also means that smaller quantities of cigarettes are available to more people.

The National Aboriginal and Torres Strait Islander Tobacco Control Project report concludes that in addition to health issues, tobacco use causes serious financial and social problems for many Aboriginal and Torres Strait Islander communities. It contributes to poor nutrition, especially in children, undermines family and community structures, and leads to concerns for personal safety. Increasing the price of tobacco through taxation has long been identified as an important and effective component of a comprehensive tobacco control program, and has almost certainly been an important contributing factor to declines in national smoking rates in the general Australian population. There is evidence that increasing the price of tobacco does result in reduced prevalence even among the most disadvantaged in the community; in fact, rates are reduced more in low-income groups than middle- and high-income groups, thus reducing social disparities in smoking.
The cost of cigarettes has been cited by many Aboriginal peoples and Torres Strait Islanders as among the reasons why they quit smoking (see Section 8.6), and the National Aboriginal and Torres Strait Islander Tobacco Control Project report recommends further study into the impact of price increases on tobacco products as a means of tobacco control in the Indigenous populations. One study on the impact of the 25% tobacco tax excise rise in 2010 on remote Indigenous communities found that while there appeared to be no effects on tobacco sales, participants reported increased demands to share cigarettes, with a perception of greater reliance on those with more disposable income to purchase cigarettes for other smokers. These strategies may have served to minimise the effects of the price increase. The impact of taxation on Indigenous smoking is discussed further in Section 8.10.14. Further initiatives addressing the economic impact of tobacco use on Indigenous communities are also discussed in Section 8.10: income management has been trialled in remote community stores (Section 8.10.10); and messages that emphasise the financial impact from smoking are being used by several communities in social marketing strategies (Section 8.10.11). Smoking and social disadvantage is discussed further in Chapter 9.

References

1. Lindorff KJ. Tobacco time for action: National Aboriginal and Torres Strait Islander tobacco control project final report. Canberra, Australia: National Aboriginal Community Controlled Organisations, 2002.


8.9 Attitudes to and beliefs about smoking among Aboriginal peoples and Torres Strait Islanders

8.9.1 Why do some Aboriginal peoples and Torres Strait Islanders smoke?

The early sections of this chapter present a range of unique historical and socio-economic reasons contributing to higher rates of smoking among Aboriginal and Torres Strait Islander communities. There are a number of social and cultural factors that also contribute to maintaining high smoking rates in Aboriginal and Torres Strait Islander communities. The most influential of these are discussed further below: the role of smoking as an alleviator of stress, and the normative nature of smoking within these communities; socialising around the smoking activity and sharing tobacco have been very important in reinforcing relationships and maintaining social cohesion. These factors that motivate or maintain smoking behaviour in turn become deterrents to quitting.

8.9.1.1 Smoking and stress

The most commonly cited reason for smoking among Indigenous Australians is as a means of alleviating stress and as a way of signalling a few personal moments of ‘time out’.\(^1\text{–}9\) In this way, Aboriginal and Torres Strait Islander smokers are similar to non-Indigenous smokers and other vulnerable groups, who also nominate stress relief as among the reasons they smoke and as a barrier to smoking cessation.\(^10\text{–}11\) The Forgotten Smokers, a study of Indigenous smoking undertaken in 2000, found that respondents liked and valued smoking because unlike anything else in their lives, it gave a perceived relaxing and calming effect.\(^2\) National survey research in 2012–13 found that more than four in five Indigenous Australians agreed that smoking calms them down when stressed.\(^12\) However, the way stress is experienced by Indigenous people can be different from the stress experience for many non-Indigenous people, and has implications for their smoking behaviour. Other than the stress caused by socio-economic conditions (e.g. low income, housing problems, and unemployment), stressors cited in studies of Indigenous smokers include: family and work expectations and responsibilities; relationship problems and family violence; racism; and life-altering events, such as deaths in the (extended) family.\(^3\text{–}5,7\text{–}9\) A study that followed the quit attempts of 32 smokers attending an Aboriginal health service found that the main barriers to achieving smoking cessation were the multiple and intercurrent life stressors that caused them to relapse.\(^3\) Several studies of pregnant Indigenous women have also found stress to be strongly associated with smoking; pregnant women have reported needing to smoke to relieve their stress, and seeing stressful events as triggers to relapse.\(^4\text{–}7\) The role of tobacco use in alleviating stress and negative feelings gives smoking value in communities experiencing high levels of daily hardship.

8.9.1.2 Smoking behaviour as a social norm

Several studies of the social context of Indigenous smoking reinforce the anecdotal evidence that strong social norms support smoking in Aboriginal and Torres Strait Islander communities.\(^1,4,13\) A study in the ACT used social network analysis to find that exposure to smokers in one’s social network and having a best friend who smoked strongly influenced whether a person was a smoker.\(^14\) The Talking About The Smokes (TATS) project undertaken in 2012–13...
found that Aboriginal and Torres Strait Islander smokers are less likely than smokers in the general population to believe that society views smoking as socially unacceptable. This belief likely has a reciprocal relationship with prevalence, such that it may be a product of and also promote higher smoking rates. Perceiving lower levels of social acceptability was associated with wanting and trying to quit.

Smoking has also been found to be a mechanism to maintain and strengthen kinship bonds and social relationships, and to enhance a sense of belonging and social cohesiveness. Social relationships are strengthened through the communal nature of smoking behaviour as well as through the exchange of cigarettes. The National Aboriginal and Torres Strait Islander Tobacco Control Project, through surveys and focus group discussions with community members and health staff across Australia, reported that the second most common reason cited for smoking was to be around other smokers. In particular, sharing cigarettes was seen as a normal part of the culture, whereas non-smokers felt alienated from the group, partly because they were missing out on the sharing of ‘the best information’ and gossip. Family members who smoke have been found to be influential in others taking up smoking and maintaining smoking behaviour, although they can also be influential in quitting.

Socialising over cigarettes has also been reported by Aboriginal health workers as a way of developing rapport with clients and of debriefing with work colleagues, although more recent research in 2012–13 has shown that most Indigenous health workers believe that being a non-smoker sets a good example to patients, and avoid smoking with or around them. Research in 2012 found that the normalisation of smoking in Indigenous communities was an overarching barrier to cessation among health workers, with smoking often a part of the workplace culture, and limited smokefree places or policies. Where smoking is commonplace, it serves as a way of identifying oneself with the group and enhancing social interactions, and reinforcing the behaviour. Within this setting, quit attempts are often undermined by others in the group and abstinence can result in a sense of exclusion. Several participants in one study on the social context of smoking reported being derided for their decision to quit, and felt that the only way to quit would be to distance themselves from their family. In a qualitative study in Western Australia, pregnant Indigenous women reported the difficulties they had quitting when their families, particularly partners, were not supportive, and when everyone around them was smoking. Having a partner who smokes, or living in a household with smokers, is significantly associated with Indigenous women smoking during pregnancy. Indigenous women interviewed in NSW suggested that pregnant women might risk social isolation by quitting, as smoking plays such an important role in social cohesion.

8.9.1.3 Other reasons for smoking

Data from the Talking About The Smokes project (2015) showed that daily smokers were less likely than those in the general population to report enjoying smoking and more likely to disagree that smoking is an important part of their life. Indigenous non-daily smokers generally held less positive attitudes towards smoking compared with Indigenous daily smokers, and ex-smokers who had quit within the past year reported positive views about quitting. About one third perceived smoking to be an important part of their life, which was negatively associated with quitting. These findings suggest that factors other than personal attitudes (such as social norms) may be responsible for the high continuing smoking rate in this population.

Other reasons for smoking that have been reported are as a way to relieve boredom, out of routine or habit (including when drinking alcohol, gambling, or having a cup of tea or coffee), and addiction. Smoking has also been seen as an aid to weight loss (sometimes, ironically, in response to health advice to reduce weight due to other medical conditions such as diabetes or heart disease). One group interviewed reported that smoking was used as a way of curbing appetite, because they did not feel like cooking, or because there was no money for food. Projects with young people have also found that youth attitudes include smoking to look older, tougher or cool, and wanting to be like older children or parents.

8.9.2 Why do some Aboriginal and Torres Strait Islander people not smoke, or why do they quit?

While smoking rates are high in Aboriginal and Torres Strait Islander communities, 53% of Aboriginal and Torres Strait Islander adults do not smoke, and 31% have never smoked. Very few studies have examined why some Aboriginal peoples and Torres Strait Islanders never take up smoking, but knowing this could be helpful in planning prevention activities. Young people in a study in Melbourne cited not wanting to be dependent on cigarettes, having seen harmful effects on the health of family members, and fearing that smoking would affect their fitness for sport. In another study
in Maningrida in the Northern Territory, young people who did not smoke stated their main reasons as adverse effect on health, being too young, fear of getting into trouble, and not enjoying it.\textsuperscript{22} Non-smoking family role models and personal resilience and determination have been cited as influential in not taking up smoking.\textsuperscript{13,22} Other factors associated with reduced likelihood of initiation to smoking are discussed in Section 8.4.3.

Interviews with a national sample of Indigenous Australians in 2012–13 found that among the daily smokers, about four in five regretted starting to smoke and reported spending too much money on cigarettes, both of which were positively associated with wanting and trying to quit.\textsuperscript{12} Other research has found that key reasons for quitting among Indigenous Australians are health considerations, particularly considering both the direct and indirect impacts on the health and wellbeing of children and families. Other reasons include objections to the smell of the smoke (mainly from women) and the financial cost of buying cigarettes.\textsuperscript{2,4} The reasons why Aboriginal peoples and Torres Strait Islanders quit are detailed in Section 8.6.

8.9.3 Awareness of the health effects of smoking and secondhand smoke

Research has shown that Aboriginal and Torres Strait Islander communities have a good understanding of general health problems associated with smoking, but less knowledge of the specific harmful effects; however as with smoking prevalence there is likely regional variation in levels of understanding. National research undertaken by the National Aboriginal and Torres Strait Islander Tobacco Control Project during 2001 found that more than 90% of respondents agreed that smoking was dangerous to health and caused a range of illnesses, including lung cancer, heart disease, emphysema and asthma, stroke and blood flow problems, blood pressure problems and problems in pregnancy. Knowledge was lower about the dangers of developing oral cancers and complications in diabetics.\textsuperscript{1} The Talking About The Smokes project also found that most Indigenous daily smokers demonstrated knowledge that smoking causes lung cancer, heart disease, and low birthweight, but fewer were aware that it makes diabetes worse.\textsuperscript{25} Studies involving pregnant Indigenous women have reported that they are aware of the general negative health impacts of smoking, but have limited knowledge of how smoking impacts on specific illnesses and on the health of the foetus.\textsuperscript{4,5,7} Similarly, a study of youth in Melbourne found that most were aware that smoking was bad for their health, but were not aware of the impacts on specific diseases.\textsuperscript{24} A small qualitative study of young people in Victoria found that 75% were aware of the ill effects of smoking, particularly the effects on their sporting performance.\textsuperscript{21} More than 60% of young people responding to a school-based survey knew about the effect of smoking on fitness and the heart, the risks associated with passive smoking, the relationship between smoking and lung cancer and respiratory symptoms, and the harmful effects of smoking to the health of adults. Fewer than 60% answered questions correctly about the contents of cigarettes, and the effect of smoking on life expectancy.\textsuperscript{22}

While awareness of the health effects of smoking may generally be good, the National Aboriginal and Torres Strait Islander Tobacco Control Project report points out that a good understanding of the health dangers of smoking does not necessarily translate into quitting behaviour.\textsuperscript{1} Knowledge of direct harms of smoking was not associated with wanting to quit and having attempted to quit in the past year among the TATS project participants.\textsuperscript{25} In one study of pregnant Indigenous women in New South Wales, about 75% of participants felt that quitting increased the chance of having a healthy baby, but 30% thought that quitting would be harder when pregnant, and 30% thought that there would be no point in quitting if they were exposed to a lot of secondhand tobacco smoking anyway.\textsuperscript{26} Widespread self-exemption through a ‘she’ll be right’ attitude, coupled with the long latency period for many of the diseases caused by smoking, also affect attitudes to quitting.\textsuperscript{2}

There is also a high awareness of the fact that secondhand smoke (SHS) is dangerous to health. Almost all daily smokers interviewed for the TATS project reported knowing that SHS is dangerous to non-smokers and children, and that it causes asthma in children. Levels of knowledge among daily smokers were lower than among nondaily smokers, ex-smokers and never-smokers.\textsuperscript{25} Levels of awareness have been shown to be higher among those employed in workplaces with smokefree policies, but this only influenced those in employment.\textsuperscript{1} Communities involved in the National Aboriginal and Torres Strait Islander Tobacco Control Project gave mixed reports about whether such knowledge had instigated behavioural change,\textsuperscript{1} while in the TATS project, greater knowledge of SHS harms was associated with health worry, wanting to quit, and having attempted to quit in the past year among smokers, unlike knowledge of direct harms.\textsuperscript{25} Ex-smokers in several studies report that the impact of smoking on others, particularly children, has motivated them to quit.\textsuperscript{2,13,21} Together, these findings suggest that messages regarding health effects may be more effective in promoting quitting-related thoughts and behaviours if they are framed in ways that focus on the health of others.\textsuperscript{25} Indeed, Aboriginal health workers have reported that smokers are more likely to respond to cessation interventions that appeal to their desire to protect those around them, particularly children. They have also reported
feeling more comfortable delivering these less confrontational messages.\textsuperscript{4,8} Given the high smoking rates among Indigenous people, SHS is likely a serious contributor to ill-health, especially for children (see Section 8.7.4).

8.9.4 The relative importance of smoking as an issue

Aboriginal peoples and Torres Strait Islanders are affected by such a large range of complex health and social issues that smoking can sometimes take a lower priority both in the health service and broader community context.\textsuperscript{2,16} In one Western Australian study, Aboriginal health workers ranked tobacco as the fourth ‘biggest problem’ (out of five options) behind diabetes, heart disease, and alcohol, although they did classify it as a ‘serious’ or ‘very serious’ problem for their communities.\textsuperscript{27} On the other hand, surveys of Aboriginal community-controlled health services (ACCHS) in 2012–13 found that most prioritised tobacco control “a great deal” or “a fair amount”, and all had smokefree policies. Most had staff working on and trained in tobacco control, and they offered extra smoking cessation support for staff.\textsuperscript{28} While some health workers have reported being reluctant to provide smoking cessation advice in the context of so many competing and more immediate issues,\textsuperscript{4,29} the ACCHSs reported providing a range of quit-smoking information and activities for clients and the community.\textsuperscript{28}

Among the general community, while 75% of the respondents in the National Aboriginal and Torres Strait Islander Tobacco Control Project study believed that smoking was a big health problem,\textsuperscript{1} it was nonetheless relegated as a priority behind alcohol or illicit drugs, which present as a more immediate problem, both at community\textsuperscript{1,16} and service levels.\textsuperscript{1} Some individuals expressed the view that smoking was an acceptable alternative to other drug use.\textsuperscript{1} Other studies have also shown that tobacco is ranked behind alcohol and other drugs by Indigenous communities.\textsuperscript{2,16,30,31}

Interestingly, the National Aboriginal and Torres Strait Islander Tobacco Control Project found that respondents tended to overestimate the prevalence of smoking in their communities. Given that the perception of high levels of smoking behaviour is seen as an impediment to quitting,\textsuperscript{1,16} there may be value in informing communities of the true prevalence of smoking, and that a significant number of Aboriginal peoples and Torres Strait Islanders choose not to smoke.\textsuperscript{1} A robust line of social psychological research has demonstrated the effectiveness of communicating normative information to powerfully shape behaviour.\textsuperscript{32} Other recommendations supporting quitting activities are discussed in Section 8.10.

References

1. Lindorff KJ. Tobacco time for action: National Aboriginal and Torres Strait Islander tobacco control project final report. Canberra, Australia: National Aboriginal Community Controlled Organisations, 2002.


8.10 Tobacco action initiatives targeting Aboriginal peoples and Torres Straits Islanders

Although health practitioners, community members and researchers have been working for many years to reduce tobacco use in Aboriginal and Torres Strait Islander communities, the delivery of tobacco action programs in these communities has until recently typically been marked by a lack of coordination and limited resources.\(^1\)\(^{-8}\) In 2008, the Tackling Indigenous Smoking Initiative was announced, which represented a significant commitment to a strategic approach to Indigenous tobacco action with accompanying funding; however, the 2014 budget saw the program’s funding cut by $130 million over five years—more than a third of the annual funding.\(^9\) The redesigned Tackling Indigenous Smoking program has a budget of $116.8 million over three years until 2018 (see Section 8.13.5).

To date, critical evaluations of the various programs that have been undertaken among Aboriginal and Torres Strait Islander communities have been sparse, or limited by small sample size and problems with research design. While there is an extensive literature about tobacco (health promotion) initiatives aimed at reducing prevalence in other populations and their effectiveness, there is a paucity of evidence that considers the appropriateness and transferability of such initiatives to Aboriginal and Torres Strait Islander contexts.\(^1,8,10^{-12}\) A systematic review of trends in Indigenous Australian tobacco research from 2004 to 2013 found that, despite a surge in research output in 2008 relating to Indigenous tobacco control, there are still few intervention studies available to guide efforts to reduce tobacco-related health disparities.\(^13\) Rigorous evaluations, particularly of secondary prevention programs and comprehensive community-wide programs, are needed to build the evidence base around tobacco action initiatives in Aboriginal and Torres Strait Islander communities.\(^14\)

Despite the limited evidence about what works in Indigenous tobacco control,\(^14\)\(^{15}\) several reviews have identified the likely factors critical to the success of designing appropriate tobacco initiatives for Aboriginal and Torres Strait Islander communities.\(^1,8,10,11,15^{-17}\) Important principles that should underpin tobacco action in Aboriginal and Torres Strait Islander communities to enhance program delivery include:\(^5,6,8,10,18^{-20}\)

- maximising community control, and building capacity within Indigenous organisations and communities
- understanding and respecting the social context in which Aboriginal peoples and Torres Strait Islanders live their lives, and ensuring that this is reflected in programs that include a focus on family and community
- developing programs that are holistic in nature and consider the social determinants of health
- drawing on existing theory and research to ensure messages and approaches are evidence-based
- ensuring that tobacco action programs are as comprehensive as possible within given resources
- evaluating all programs with a view to building the evidence of best practice in Indigenous tobacco action
- making sufficient and ongoing funding available to develop sustainable long-term programs
- building cooperative relationships across sectors, while always being mindful of maintaining Indigenous community control within these relationships.

A 2016 systematic review examined strategies to reduce commercial tobacco use in Indigenous communities globally. The authors concluded that the breadth of research indicates a growing prioritisation and readiness to address the high rates of smoking among Indigenous people. A comprehensive approach comprising multiple activities, Aboriginal leadership, long-term community investments, and the provision of culturally appropriate health materials and activities appear to be important elements for promoting positive change.\(^21\)

This section will summarise the current evidence around successful tobacco action interventions in the Australian Indigenous context, and provide examples of programs and activities that have been (and are being) implemented in Aboriginal and Torres Strait Islander communities. The examples given are not exhaustive, and readers interested in knowing more about particular programs in Aboriginal and Torres Strait Islander communities are referred to online resources that provide updated information on programs around the country.\(^1\)

8.10.1 Considering the context to develop relevant tobacco action programs

If smoking is understood as a ‘socially and culturally patterned behaviour’, then differences between Indigenous and non-Indigenous communities in history, social and cultural background and attitudes to health suggest that initiatives that have shown success elsewhere may not all be transferable to Indigenous contexts without at least some degree of modification.\(^12\) In addition, there are many nations within Australian Aboriginal peoples in which the cultures and social practices vary considerably, therefore a ‘one size fits all’ program is unlikely to be successful. Tobacco action within Aboriginal and Torres Strait Islander communities must incorporate approaches that take into account the socio-economic realities of people’s lives and the unique social and cultural contexts, as well as considering how to overcome challenges within the healthcare delivery system that may contribute to reducing the effectiveness of tobacco action initiatives.

The impacts of socio-economic factors on smoking rates for Aboriginal peoples and Torres Strait Islanders have been discussed in Section 8.3. Clearly, tobacco action initiatives must take into account the underlying socio-economic realities facing many Indigenous people, and work towards addressing
broader social disadvantage. However, it should be noted that the causal pathways between specific variables of socio-economic disadvantage (such as income, education, employment and housing) and smoking are not clear; the pathways are, in fact, likely to be highly complex and interconnected. Simply addressing one or another of these variables is unlikely to have an impact on smoking rates by itself.22

These socio-economic factors also contribute to the complex stressors that Aboriginal peoples and Torres Strait Islanders may face in their daily lives. Smoking is commonly perceived as a means of coping with stress (see Section 8.9.1.1).23 However, smoking appears to increase stress levels,24 while quitting is associated with reduced stress, depression, and anxiety,25 therefore, an additional benefit of cessation may be improving the mental health of Indigenous peoples.

Socio-economic factors alone are not, however, sufficient to be driving high rates of smoking in Aboriginal and Torres Strait Islander communities. While smoking does increase along with socioeconomic disadvantage among Indigenous peoples, an analysis of the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISSE) found that even among those in the highest quintile of household income, smoking prevalence was still at 37%, compared to an overall prevalence of about 51%.22 Clearly, social and cultural factors also play a role in promoting smoking28 (see Section 8.9.1.2). Given the influence of extended family relationships in the uptake and prevalence of smoking, as well as in quitting, family-centred initiatives based in the home and community are likely to be an influential part of tobacco action programs in Indigenous communities.26 In addition, community esteem and respect for elders and older community members means that supporting them to quit may contribute to initiating more widespread declines in smoking behaviour through role modelling.27

Some argue that mainstream public health messages lack relevance for many Indigenous people.12,27,28 Several studies suggest, however, that many mainstream tobacco action activities are acceptable to and effective for Aboriginal peoples and Torres Strait Islanders (see Section 8.10.1).12,29,30 While modifications of programs may be important, the role of the health system in reducing the effectiveness of tobacco action programs should not be overlooked.12 Barriers in the health system that can affect program efficacy include: workforce turnover; lack of staff training opportunities; the orientation of services towards acute rather than preventive care; and access to and availability of appropriate health services and treatment for Indigenous people (see Sections 8.10.4 and 8.10.5). Adequate and sustained funding to the healthcare system specifically for Indigenous people and specifically directed towards tobacco action has also been cited as necessary for program success.5,8,31

8.10.2 Taking a comprehensive approach

Comprehensive tobacco action programs that are likely to have the greatest success in Aboriginal and Torres Strait Islander communities are multi-component, take a whole-of-community approach, are integrated across different activities within health services, and work across different sectors within communities. In mainstream programs, it is well understood that addressing one part of tobacco control in isolation reduces the chances of success.32 For example, the benefits of producing salient health messages are diminished if appropriate training for health staff to provide further information and support in quitting is not provided. Offering access to pharmacological aids to cessation in the absence of creating a supportive structure in which cessation can occur is similarly unlikely to succeed.32 It is likely that a cumulative effect of exposure to low-level or indirect anti-smoking activities delivered as part of a comprehensive tobacco action program may affect Indigenous smokers quitting by themselves; some studies have noted high levels of Indigenous smokers who have quit without the use of organised programs or specific help.33,34

It is also important not to treat tobacco use in isolation. Strategies intended to reduce smoking rates will not be effective if planned without reference to community-identified health priorities such as alcohol and other drug misuse, violence, education and employment. As with other disadvantaged groups, raising standards of living and improving educational and employment opportunities can be expected to enhance overall health outcomes, as well as bringing about declines in smoking. Tobacco interventions need to be part of a multi-level approach that recognises the broader social, economic, and cultural environment of communities.35 Equally, effective tobacco control strategies that reduce uptake and promote cessation can help address many of these problems, for example by improving mental health25 and relieving financial stress.36

Such multi-level, comprehensive approaches are consistent with the principles of Indigenous community-controlled primary healthcare and with a holistic view of health. This concept, where health is ‘not just the physical well-being of the individual, but the social, emotional and cultural well-being of the whole community’,37 and that all aspects—community, land, mind and spirit, the physical and spiritual—are interconnected and interdependent, means that consideration of one element cannot meaningfully occur in isolation from the others.38 This world view underpins the delivery of healthcare by Aboriginal Community Controlled Health Organisations that ideally focus on comprehensive, integrated and preventive approaches within a framework of community control and self-determination.39

Many multi-component tobacco action programs have been, or are currently being, implemented in Aboriginal Community Controlled Health Organisations and in Aboriginal and Torres Strait Islander communities. These include: the Tobacco Project;40,41 the Top End Tobacco Project (Northern Territory);42,44,45 Clean Air Dreaming (New South Wales);46 Building Evidence to address Aboriginal Tobacco Habits Effectively (BREATHE),47 and Tobacco Resistance and Control (A-TRAC) Program (Aboriginal Health and Medical Research Council of New South Wales);48 Our Space Smoke Free (Queensland);49 Deadly Nungs Say No to Puyia (South Australia);50,51 Northern Territory Tobacco Project;51 Goreen Nankwarren Ngm-toura (Healthy Family Air) (Victoria);7,52 Stop Smoking in its Tracks (New South Wales);53 Beyond the Big Smoke (Western Australia);54,55 Be Our Ally Beat Smoking (Western Australia);56 Reducing Aboriginal Children’s Tobacco Exposure in the Pilbara;57 The Smokers Program (Maari Ma Health Aboriginal Corporation—New South Wales);58 No Smokes North Coast (New South Wales);59 the No More Boondah Program (ACT);60 Gipsiland Tobacco Action & Healthy Lifestyle Team (Victoria);61 and tobacco control programs at Miwatj Health Aboriginal Corporation,62 Kimberley Aboriginal Medical Services Corporation, the Tasmanian Aboriginal Corporation,64 and in remote north Queensland.65 This list is not exhaustive, and there are many other organisations working on tobacco action projects (see footnote i).

These projects include a selection of the following components:

- brief interventions
- specialised tobacco action workforce
- increased health care check-ups and subsequent referral advice
- training for the workforce (both specialised and general) in tobacco action, including in brief intervention
- pharmacological assistance—nicotine replacement therapies, bupropion, and varenicline
hospital cessation programs
referral to quitlines
quit support groups
health education activities—including education sessions, DVDs, websites
social marketing campaigns, including television, radio, print, posters, pamphlets, the internet and mobile phones
sponsorship of cultural, sporting and community events
outreach-style programs, such as family-centred home-visit-based programs
programs to reduce exposure to secondhand tobacco smoking in the home and/or car
development and implementation of smokefree workplace policies
programs to support specific sub-populations to quit—Aboriginal health workers, pregnant women, prison inmates
prevention programs with youth and children
incentive-based programs to encourage cessation
broad state/territory and Commonwealth legislation.

Many of the multi-component tobacco action programs listed above have not been evaluated; others have been evaluated, but are not yet published. Published evaluations of multi-component projects in the Northern Territory31,40,41 and North Queensland65 have found no measureable impact on smoking cessation, although one of the Northern Territory studies found increases in knowledge of the health effects of tobacco and readiness to quit.43 This and another Northern Territory study also found that those communities with the most tobacco action activity measured the greatest decline in tobacco consumption.31,41 Importantly, the evaluation of the North Queensland Indigenous Tobacco Project found that health services and communities felt that they had minimal ownership and input into the project, and this may have affected the limited overall impact that the program had.66 The success of community-based multi-component programs relies on community ownership, and involvement in the development, implementation and evaluation of these programs.8

Other research has shown greater promise for multi-component programs. Evaluation of a complex, community-based tobacco control program implemented in eight remote north Queensland Indigenous communities found that, despite considerable shortcomings in delivery of the various components, there was a significant decline in smoking and consumption.65 The Be Our Ally Beat Smoking (BOABS) study tested the effectiveness of a locally-tailored, intensive, multidimensional smoking cessation program provided by trained Aboriginal researchers. Twelve months after enrolment, the smoking cessation rate for participants in the program (n = 6), while not statistically significant (possibly due to the small sample size), it was double that of usual care.56 A project at the Maari Ma Health Aboriginal Corporation involved an intensive 12-week Smoker’s Program with a case manager and an individualised management plan (including nicotine replacement therapy and other pharmacotherapies, counselling support, referral to quitline and ongoing support) delivered in the context of other health service activities such as brief intervention training for all staff (even non-clinical staff), and the implementation of smokefree workplace policies. Within the context of these other activities, the Smoker’s Program appears to have been successful at promoting quit attempts among participants; 16.3% of Aboriginal people who had ever participated in the Smoker’s Program (up to June 2009) had a ‘quit’ status at 12 months after entering the program.58

8.10.3 Harm reduction approaches

Roche and Ober have argued that adoption of harm reduction strategies might usefully increase the range of initiatives open to health workers in Aboriginal and Torres Strait Islander communities.67 Harm reduction places a priority on limiting damage caused by tobacco use, rather than making cessation the primary goal. In societies where tobacco use is endemic and barriers to quitting complex, it may be that the pragmatic approach offered by harm reduction is more likely to deliver measurable health benefits. Cutting down on the number of cigarettes has been reported by Indigenous smokers, particularly in studies of pregnant smokers, as a conscious strategy to reduce tobacco-related harm;63,68 however, this approach is not recommended by peak public health organisations,69,70 as the long-term health benefits of a reduction in smoking is unclear.71 Cutting down, particularly when combined with nicotine replacement therapy, appears to be more useful as a step toward quitting.71

Elements of harm reduction in relation to tobacco use might include increasing ease of access to treatment, protecting non-smokers (e.g. by introducing smokefree areas), and monitoring for early signs of smoking-related illness.67 Roche and Ober contend that given the damage tobacco causes among Aboriginal and Torres Strait Islander communities, it is likely that any potential gains accrued from adoption of a harm minimisation approach would outweigh possible disadvantages. However, they underline the need for monitoring and evaluation of any strategies, particularly the importance of allowing particular communities to develop their own programs.

8.10.4 Roles of health services

Smoking cessation activities are available to Aboriginal peoples and Torres Strait Islanders through a variety of health service contexts: Aboriginal community controlled health services, pharmacies, and general practitioners. Recent developments in Aboriginal health policy and funding have been strategically directed within these sectors to address chronic diseases and risk factors such as smoking.72,73

Many Indigenous people access healthcare primarily through Aboriginal community controlled health services. These organisations are largely governed and managed by Indigenous people from the local community, and employ Aboriginal health workers to assist in the delivery of holistic, comprehensive, and culturally relevant healthcare. Aboriginal community controlled health services have an important role to play in implementing smoking cessation activities, but the nature of these activities, and their capacities to deliver them, vary from location to location. Smoking cessation programs may include: clinical level activities such as brief interventions, nicotine replacement therapy provision and support programs; and preventive activities within the health services, such as health education, social marketing, and the development of supportive workplace policies. Staff from Aboriginal community controlled health services may also become involved with supporting broader community-level initiatives, such as developing local social marketing campaigns, policies around smokefree community areas, or programs delivered through schools, stores or other organisations. Many health services are also specifically implementing programs and activities to support their staff to quit smoking (see Section 8.10.13.1).

A number of studies have documented the service capacity issues faced in delivering tobacco control programs within Aboriginal community controlled health services.12,31,35,63,74 Traditionally, many health services have found it difficult to prioritise tobacco control as there are so many other competing and immediate health and social issues; service delivery have often placed a disproportionate focus on acute biomedical healthcare rather than on
Some health workers report that there is not enough time to build relationships with patients that are sufficiently robust to enable them to raise what they see as sensitive and confronting lifestyle issues (such as smoking).\textsuperscript{74} Health service staff involved in one study suggested adult health checks as an enabler to conducting brief interventions, but several services in this study had found it difficult to incorporate adult health checks into their work practice.\textsuperscript{74} Other service capacity issues include: the capacity (particularly time and resources) to provide and support adequate training;\textsuperscript{12,74} high staff turnover and difficulty retaining skilled staff;\textsuperscript{31,35,74} inadequate resourcing to sustain activities;\textsuperscript{31} lack of infrastructure to adequately provide programs;\textsuperscript{74} and lack of follow-up services to which to refer patients.\textsuperscript{63}

Taking a team approach to healthcare delivery,\textsuperscript{12} and strong and consistent leadership\textsuperscript{34} have been recognised as enablers to implementing cessation interventions. One study found that where the community is ‘ready’ to respond to smoking—i.e. tobacco control has been identified as a priority, key stakeholders are mobilised, and staff have been made available to implement activities—tobacco control activity is more likely to occur.\textsuperscript{31} Indeed, national surveys of Aboriginal community-controlled health services (ACCHS) in 2012–13 found that most prioritised tobacco control “a great deal” or “a fair amount”, and this translated to smokefree policies, staff training in tobacco control, extra smoking cessation support for staff, and the provision of a range of quit-smoking information and activities for clients and the community.\textsuperscript{75}

While Aboriginal community controlled health services are central in the delivery of healthcare to Aboriginal peoples and Torres Strait Islanders, many Indigenous people will access mainstream services—i.e. those without Indigenous structures of governance. The effectiveness of such services may be limited by factors such as cost, reduced cultural safety, language barriers, and racism (whether perceived or actual). It is crucial that mainstream services are well equipped, through appropriate training, funding, and referral relationships, to work with Aboriginal and Torres Strait Islander clients. For example, the Practice Incentives Programs Indigenous Health Incentive provides financial incentives for general practices to manage complex chronic disease issues for Indigenous patients, and the Pharmaceutical Benefits Scheme Co-payment Measure enables the subsidisation of medications (including nicotine replacement therapy and other pharmacotherapies) for the prevention or management of chronic diseases.\textsuperscript{70} Hospitals can also provide support to Indigenous inpatients who have been identified as smokers, for instance by informing them of the hospital’s smokefree policy, advising and supporting them with options for managing nicotine withdrawal during their stay, and offering them further support after discharge.\textsuperscript{77} High-intensity cessation support has been found to result in higher quit rates in other populations,\textsuperscript{78} and could also be successful for Aboriginal peoples and Torres Strait Islanders.\textsuperscript{1}

Smoking cessation activities are available to Aboriginal peoples and Torres Strait Islanders through a variety of health service contexts: Aboriginal community controlled health services, pharmacies, and general practitioners in community or government health services and private practice. Recent developments in Aboriginal health policy and funding have been strategically directed within these sectors to address chronic diseases and risk factors such as smoking.\textsuperscript{80,61}

### 8.10.5 Roles of Aboriginal health workers

Aboriginal health workers are critical to the delivery of primary healthcare interventions and therefore play an important role in addressing smoking in communities. However, they face very particular challenges in delivering tobacco action activities. Such workers often come from and reside in the communities where they work.\textsuperscript{79} Since they are part of the same social context as their client base, it is not surprising that they also have comparatively high smoking rates (see Section 8.3.4). The nature of the work and the workload is also stressful, given that they are immersed in communities with high health and welfare needs, operate within time and resources constraints, and have specific social expectations placed upon them by family and community members.\textsuperscript{80} The stress and grief that accompanies their work makes it more difficult for Aboriginal health workers who smoke to quit themselves,\textsuperscript{81} and also provides a challenging work environment within which to deliver smoking cessation activities.

Studies report varying rates of Aboriginal health workers asking clients about their smoking status and talking to clients about cessation. One Western Australian study of 36 Aboriginal health workers reported that one-third asked all of their clients if they smoked, but just over a quarter asked none.\textsuperscript{82} In a New South Wales study involving 98 Aboriginal health workers, 80% reported providing quit smoking advice in their professional capacity.\textsuperscript{83} However, while most Aboriginal health workers in a qualitative study in Western Australia (n=10) reported routinely asking their pregnant clients if they smoked, very few followed this up with specific cessation advice.\textsuperscript{63} Another study with Indigenous pregnant women found that while most had been asked by a health worker during their antenatal care if they smoked (95%), fewer had been given advice to stop smoking (83%), and even fewer had been offered support to stop smoking (65%).\textsuperscript{84} The National Aboriginal and Torres Strait Islander Tobacco Control Project also found that fewer than half of surveyed health staff reported that they had discussed tobacco with clients.\textsuperscript{18} More recently, among a national sample of Aboriginal and Torres Strait Islander smokers and recent ex-smokers surveyed in 2012–13, almost all daily smokers who had seen a health professional in the year prior recalled being asked if they smoke, and three quarters were advised to quit. This advice was associated with making a quit attempt.\textsuperscript{85}

Aboriginal health workers may face a range of barriers that hinders their capacities to provide smoking cessation advice, which include high prevalence rates, community attitudes to smoking, and their levels of confidence, knowledge and skills to deliver tobacco control activities. The lower relative priority of smoking when compared to other more urgent health and social issues affecting clients’ lives (including from other more immediately damaging alcohol and drug misuse) affects the extent to which health workers prioritise smoking cessation in the clinical context, and their capacity to undertake preventive activities in tobacco control.\textsuperscript{35,63,83} Looking from the perspective of the client rather than the health worker, The Forgotten Smokers reported that smokers felt they had limited access to health workers, and that health workers were generally too busy caring for people with acute health problems to have the time to talk about smoking.\textsuperscript{86} The need for a specialised tobacco action workforce is widely recognised as a way to improve the capacity of services to deliver tobacco action activities,\textsuperscript{5,12,87} and forms the backbone of the response under the Tackling Indigenous Smoking program.\textsuperscript{73}

There is a consistent view across various geographical settings that high rates of smoking among Aboriginal health workers may affect their confidence and capacity to offer smoking cessation advice to their clients.\textsuperscript{27,35,79,82,83,88} A small Western Australian study reported that compared with Aboriginal health workers who smoke, those who are non-smokers and ex-smokers are more likely to advise smokers to quit and to provide warnings about the detrimental health effects of smoking.\textsuperscript{82} Similarly, a national survey of staff of Aboriginal community-controlled health services found that ex-smokers were most likely to report being confident in talking to others about smoking and quitting.\textsuperscript{89}
Health workers who smoke may feel hypocritical or as though they lack credibility when providing cessation advice, particularly if they have unsuccessfully attempted to quit.\(^{27,88}\) Aboriginal health workers have reported that if they could quit themselves, they would feel more confident speaking to community members about quitting.\(^{27}\) They have also expressed desire for support in the workplace to quit, such as nicotine replacement therapy, quit groups and quit buddies.\(^{95}\) However, research from New South Wales has shown that some health workers who were non-smokers also felt uncomfortable discussing smoking, since they lacked personal experience of tobacco addiction and making quit attempts.\(^{83}\) Another study in Western Australia reported that two non-smoking Aboriginal health workers (of 36 total participants) felt uncomfortable talking to clients about cessation as they worked with colleagues who smoked and so did not want to appear hypocritical by association.\(^{82}\)

Aboriginal health workers (whether smokers or non-smokers) have also expressed concern that discussing smoking cessation could be perceived by their clients as judgemental and moralising.\(^{35,63,82,90}\) Health workers have reported being concerned about making their clients feel badly about themselves by raising smoking cessation, particularly when so many other health and social issues are affecting them.\(^{35,63}\) Some Aboriginal health workers have reported discomfort at providing smoking cessation advice to elders or respected family members,\(^{12,35,82,91}\) and some are also worried that raising smoking will damage the therapeutic relationship and discourage patients from returning for ongoing healthcare.\(^{63,74}\) They have reported attenuating this discomfort by using less confrontational strategies for talking to people about smoking, including speaking about the general effects or talking about reducing passive smoking around children.\(^{63}\) However, while Aboriginal health workers have these concerns, their clients do not necessarily agree. One study with pregnant Indigenous women in New South Wales found that 80% of the women thought that healthcare workers should advise pregnant women to quit.\(^{84}\) There is also strong support among Aboriginal communities for smokefree Aboriginal community-controlled health services, with national surveys showing that 87% of non-smokers, 85% of ex-smokers, and 77% of daily smokers support a complete ban on smoking inside and around the buildings.\(^{75}\)

Studies and workshops examining workforce issues in Indigenous tobacco control cite lack of knowledge, skills and training as other reasons for not providing information to promote quitting.\(^{14,18,35,50,82,83,86,90,92–95}\) While smoking is part of the competencies in Aboriginal health worker training, how this is actually taught varies from provider to provider. A survey of training providers found that most taught general information about tobacco use, but few provided skills-based training in facilitating quit groups or in using nicotine replacement therapy. Additional resources were needed for both Aboriginal health workers and the trainers.\(^{94}\) Another study supports this finding that training should cover more than simply brief interventions, and include information about addiction, motivational interviewing and the use of pharmacotherapies.\(^{82}\) Indigenous-specific packages to deliver brief intervention training have been developed (see Section 8.10.6), and other training packages and toolkits have been developed around the country.\(^{95,96}\)

### 8.10.6 Brief interventions and brief intervention training

Brief interventions delivered by health professionals are effective in reducing smoking prevalence in various mainstream settings,\(^{97–99}\) and are quick, inexpensive and non-invasive to deliver.\(^{8}\) There have been no studies specifically evaluating the efficacy of brief interventions delivered to Aboriginal peoples and Torres Strait Islanders, particularly when delivered by Aboriginal health workers. A number of evaluations have included brief interventions or individual counselling as part of the overall delivery of treatment,\(^{33,66}\) but it is difficult to assess the contribution of brief interventions to cessation rates. A qualitative study involving interviews with 25 residents of remote Northern Territory communities reported that for those with a smoking history (15 current smokers, six ex-smokers, two recently quit smokers) brief interventions from Aboriginal health workers were influential in their decision to quit, particularly when provided in the context of acute health events.\(^{12}\)

In mainstream settings, training health professionals in providing smoking brief interventions has been shown to have a measurable effect on their professional practice; they are more likely to identify smokers and to provide them with smoking cessation advice than untrained professionals.\(^{100}\) Even when doctors merely provide brief, simple advice about quitting, this increases the likelihood a smoker will successfully quit and remain a non-smoker 12 months later.\(^{101}\)

In Indigenous contexts, training programs such as SmokeCheck have been rolled out in several states to address the lack of skills and confidence that health workers face in delivering smoking cessation advice and tobacco programs. SmokeCheck has been adopted in Queensland, New South Wales, South Australia and Western Australia, and evaluated in Queensland and New South Wales.\(^{90,102}\) The evaluation of the New South Wales SmokeCheck program found that there were significant increases in the confidence of health workers to talk to their clients about the health effects of smoking, raise ‘quitting’ with clients making health visits for unrelated reasons, assess clients’ stage of change for smoking cessation/readiness to quit, and raise smoking as a point of discussion with clients. In addition, there were increases in the number of health workers who provided advice about nicotine replacement therapy, secondhand tobacco smoke, and cutting down tobacco use. More Aboriginal health workers recognised the importance of offering smoking cessation advice to their clients after the training, and perceived that it was easier to offer this advice after having received the training. The number of Aboriginal health workers living in smokefree homes increased during the project, as did the availability of culturally appropriate written resources to support clients to quit.\(^{102}\) Similar to the evaluation of the use of SmokeCheck in Queensland,\(^{35,66,90}\) and New South Wales,\(^{103}\) found that health workers were satisfied with the training, that it increased their confidence to deliver smoking cessation advice appropriately, and that it improved their clinical practice. However, one study found that six months after their training, most health workers failed to deliver the intervention as intended due to perceived challenges in working in remote Indigenous communities.\(^{35}\) Similarly, follow up interviews with health workers trained in SmokeCheck in remote North Queensland indicated that while they felt positive about the training, they did not use brief interventions in the manner in which they had been trained, reporting instead that they adapted and used only some of the components.\(^{65}\)

While SmokeCheck training may have benefits for practitioners who smoke, its effectiveness in improving smoking cessation rates for patients is not yet clear. One study of the South Australian SmokeCheck program that has followed up clients at three and six months appears to have encouraged quit attempts, but the numbers are too small to make definitive statements about the success of this program.\(^{104}\) In a study evaluating the impact of a SmokeCheck pilot program in Queensland, there was no evidence that any patients or practitioners had given up smoking after six months.\(^{35}\) The remote North Queensland research mentioned above implemented SmokeCheck (albeit inconsistently) as part of a comprehensive tobacco control program, which overall resulted in a decline in consumption among Indigenous communities.\(^{65}\)

Quit Victoria has also been involved in developing and delivering educator training to Indigenous communities in Victoria and the Northern Territory. This two-day training program provides general information and brief intervention training, and notably presents this in an interactive way to promote participants to think about and problem solve the challenging situations in which they may find themselves.\(^{91}\) Quit South Australia is funded by the Commonwealth government as part of the Tackling Indigenous Smoking program to provide a number of different smoking cessation training courses (QuitSkills and Motivational Interviewing) to health workers who work with Aboriginal peoples and Torres Strait Islanders.\(^{105}\) While these programs may
be successful in improving health worker confidence to talk to clients about smoking cessation, the impacts on actual smoking rates, as with the SmokeCheck program, are not known.

8.10.7 Pharmacological assistance: nicotine replacement therapies, bupropion (Zyban) and varenicline (Champix)

There is evidence in other populations that nicotine replacement therapies (NRT), bupropion (Zyban) and varenicline (Champix) are effective at increasing the likelihood of cessation success (see Chapter 7). There is evidence in studies in the US found that nicotine patches or bupropion were effective at helping African American smokers to quit, and a study involving Maori smokers found that bupropion was an effective treatment for smoking cessation.

Only a small number of studies have examined the effectiveness of nicotine replacement therapies and/or bupropion among Indigenous Australians, and have found success rates between 6–19%—in New South Wales (two studies), Queensland (one study), Northern Territory (one study) and Victoria (one study). The sample sizes of most of these studies have been small, and none has been a randomised controlled trial. All have combined nicotine replacement therapy and/or bupropion with brief intervention and/or some kind of ongoing counselling or support. Although the quit rates are lower than those reported for other populations in the medical literature, these studies provide evidence that assisted availability of nicotine replacement therapy, in combination with appropriate cessation support counselling, could benefit some Indigenous smokers. Several studies challenge the common perception that Indigenous people tend to be heavy smokers, and suggest that nicotine replacement therapy prescription should not assume that Indigenous smokers are necessarily heavily addicted. These studies have found low levels of nicotine addiction in some communities or sub-populations (measured by daily consumption based on store sales, or on the Fagerström Test for Nicotine Dependence) for whom nicotine replacement therapy prescription would not necessarily be appropriate.

Several studies have also surveyed Indigenous Australians regarding their attitudes to and beliefs about pharmaceutical cessation assistance. In 2001, the National Aboriginal and Torres Strait Islander Tobacco Control Project spoke to 275 Aboriginal people and Torres Strait Islanders around the country and reported a high awareness of the existence of pharmaceutical aids to quitting smoking, and particularly of nicotine replacement therapy. However, a lack of factual information had led to a wide range of misconceptions and misunderstandings about the nature of these products and how they worked. Similarly, a study in six remote Northern Territory communities involving 25 community members and 19 health staff reported that knowledge about how nicotine replacement therapy works was low. Among the obstacles to access cited in these studies are: limited availability in some communities—nicotine replacement therapy is not routinely stocked, and there is a long delay between ordering and delivery of these medications; health staff report a lack of knowledge and confidence in prescribing; poor patient compliance—patients would not return for new supplies, or would run out after sharing their nicotine replacement therapy with other family members; and cost.

Research in 2012–13 explored past and intended use of NRT, varenicline, and bupropion. Nicotine patches were most commonly used among a national sample of Indigenous Australians, followed by varenicline and nicotine gum. Despite similar proportions believing that they can help smokers quit, compared with non-Indigenous daily smokers, fewer Aboriginal and Torres Strait Islander daily smokers had ever used any NRT or medications (37% vs 58.5%), or used them in the past year (23% vs 42.1%), and these proportions were lower again for socioeconomically disadvantaged Indigenous smokers. Activities that are likely to succeed of nicotine replacement therapy in helping Indigenous smokers to quit are: providing better information to patients and the community, providing nicotine replacement therapy as part of a comprehensive tobacco cessation program, providing ongoing support and counselling to patients through regular face-to-face meetings, and providing nicotine replacement therapy free of charge to Indigenous smokers wanting to quit.

Since December 2008, nicotine patches have been available to Aboriginal and Torres Strait Islander patients at a subsidised cost on an authority script through the Pharmaceutical Benefits Scheme (PBS). However, since July 2010 nicotine patches and other pharmacotherapies have become available to Aboriginal and Torres Strait Islander patients on an authority script for no cost to healthcare cardholders and at the concessional rate for others. This is available as part of the PBS co-payment measure of the Practice Incentives Program Indigenous Health Incentive to services that are accredited against the Royal Australian College of General Practitioners (RACGP) standards. Among those surveyed in 2012–13, the majority of Indigenous people had obtained their last NRT free of cost. However, some Indigenous people will likely still face barriers to accessing health services that will hinder their ability to obtain NRT and other pharmacotherapies (such as cultural safety, language and racism—see Section 8.10.4) will remain. Other issues with the implementation of this incentive have also been raised, including the relatively lower rates of accreditation of Aboriginal community controlled health organisations, in 2010–11, while 71% of Aboriginal and Torres Strait Islander primary health-care services were accredited, 26% of these services had not achieved accreditation by the RACGP, meaning they were ineligible for the incentive.

8.10.8 Quitlines

Quitlines, when used as a component of anti-smoking campaigns, are cost effective and increase quit rates, particularly when multiple calls are made. There is international evidence that quitlines can be acceptable to and effective for Indigenous peoples. An evaluation of Aboriginal and Torres Strait Islander utilisation of the South Australian Quitline found that similar proportions of Indigenous and non-Indigenous smokers registered for the service, and demographic variables and smoking addiction were also similar. However, Indigenous callers received significantly fewer callbacks and were significantly less likely to set a quit date. Three months later, they were significantly less likely to have successfully quit. The authors conclude that Indigenous Australians appear to be less engaged with the quitline, and suggest that tailoring the service might improve engagement. Other studies have shown that quitline services may be enhanced for Indigenous people through cultural awareness and competency training of staff, the availability of Indigenous quitline counsellors, the provision of nicotine replacement therapy in conjunction with telephone counselling, and when broader anti-smoking campaigns are targeted to culturally specific groups. One study in an Aboriginal health service in Victoria noted that, with encouragement, apprehension to receive support through quitlines was overcome, and that the quitline was well liked and potentially useful. However, quitlines are likely to be inappropriate and inaccessible for Indigenous people who live in remote or very remote areas, due to language barriers and access to the use of a phone. Improving access to and appropriateness of quitlines is one of the activities of the Tackling Indigenous Smoking programme, and includes enhancing access to Aboriginal and Torres Strait Islander-specific quitline counsellors (see Section 8.13.5).
8.10.9 Quit support groups and rehabilitation-style programs

While individually based interventions may work best for some, research also highlights the possible advantages of establishing support groups for those who want to quit smoking, particularly older smokers who find it difficult to resist the smoking behaviour of their peer group. These groups, preferably led by an Indigenous ex-smoker and perhaps open only to Indigenous people, would build upon sense of community and be likely to increase the success of quit attempts.27,66 The concept of rehabilitation-style programs, like those offered for alcohol and other drug withdrawal, has also been raised as a possibility.18

There has been limited evaluation of quit support group programs for Aboriginal peoples and Torres Strait Islanders, though a small number of studies point to the potential of quit groups delivered as part of a more comprehensive approach and when modified to meet the needs of Aboriginal and Torres Strait Islander communities. A short course delivered in group sessions over a three-week period by an Aboriginal medical service in a rural community in Victoria achieved a 19% quit rate (6 of 32 participants). However the course was part of a multi-component community intervention that included brief cessation advice, nicotine replacement therapy, ongoing support from Quitline and the quit facilitator and an individually tailored management plan that involved a range of health professionals.112 Similarly, the ‘No More Boondah’ program in the ACT includes group support sessions as part of comprehensive smoking cessation supports. An unpublished evaluation shows that it has been successful at engaging community members, and supporting them to quit. Of the program participants, 29.8% ceased smoking and a further 23.9% reduced their smoking, an effect that remained at two and six months follow up.129

An evaluation in NSW of ‘Give up the Smokes’—a culturally-appropriate group smoking cessation program for Indigenous Australians—reported a 30% quit rate after three months, which is comparable to cessation outcomes in non-Indigenous populations.130 A study in remote North Queensland offered assistance to local councils to implement the ‘Smoke Rings’ group support program for Indigenous smokers; however, only one of five councils adopted the program. This study highlighted significant problems with program implementation in remote communities, with no local health workers available to assist with delivering the program, one in five participants being a non-smoker, and poor and decreasing engagement. Smoke Rings formed part of a comprehensive suite of interventions, which together led to a reduction in smoking.65

Health and welfare staff (n=19) working in remote Northern Territory communities reported that programs that are unmodified from the mainstream content and delivery mode are inappropriate for this setting. The course and materials should not only be translated appropriately, but the concepts in the program need to be ‘translated’ into an Indigenous worldview. In one community, staff had adjusted the group program to be delivered informally to family groups within their homes, rather than to mixed groups at a central location.12

8.10.10 Role of remote community shops

As part of the 1999–2000 evaluation of a Northern Territory tobacco action project, researchers assessed the potential role of remote community stores to be involved in health promotion programs around tobacco action. Findings from the study suggest that community shops serving remote communities may potentially assist in tobacco control by supporting community tobacco action programs, through displaying or providing anti-tobacco health promotion materials, implementing smokefree policies, and providing staff with training to deliver cessation advice. Pricing policies adopted by community stores may also affect tobacco sales, although this is an area requiring further research.131 One study examined the effects of ‘income management’ on sales of tobacco in 10 remote Indigenous communities in the 18 months before and after the introduction of the Northern Territory Emergency Response. Income management strategies restrict the purchase of certain products, including cigarettes and tobacco, on 50 per cent of welfare recipients benefits aiming to encourage the sale of healthy food. The Income Management evaluation found no beneficial effect in terms of sustained change in the sales of healthy food, soft drink or tobacco resulting from the strategy. It did, however, find that there was a marked increase in all store sales with the government stimulus package. These findings suggest that income management alone will not lead to modification of spending patterns.132

8.10.11 Social marketing

Mainstream social marketing campaigns, when well-funded and sustained over time, have been effective at reducing smoking prevalence.133 However, there are limited studies on the impact of mainstream media campaigns on Aboriginal peoples and Torres Strait Islanders. Evaluations of the National Tobacco Campaign found that recall of these advertisements was high, but that there was little effect on quitting attempts or on smoking cessation rates.27,134 A 2008 evaluation of the impact of the Bubblewrap campaign6 on 198 Indigenous smokers in Western Australia also found high rates of recall. In addition, the advertisements were judged to be believable and relevant by the majority of participants, and most had thought about cutting down the amount they smoked (81%) and/or quitting (68%) as a result of seeing these advertisements.135

A qualitative study involving interviews with 25 community members and 19 health service staff in remote Northern Territory communities reported good recall of mainstream anti-tobacco media messages, especially those using graphic imagery.12 These findings have been replicated in a study involving 145 Indigenous and 156 non-Indigenous people who were asked to rate mainstream anti-tobacco advertisements on a scale that included message acceptance and personalised effectiveness. Indigenous people rated the mainstream advertisements higher than non-Indigenous people, and found advertisements with strong graphic imagery depicting emotive first-person narratives about the health effects of smoking particularly motivating. These findings suggest that Aboriginal and Torres Strait Islander smokers may be positively influenced by mainstream anti-smoking mass media campaigns, and that this could be a cost-effective way of impacting on smoking rates.29

There have, over the years, been a number of examples of Indigenous-specific tobacco-related social marketing campaigns or projects. These generally take the form of an Indigenous component of a mainstream campaign or program (for example, posters or advertisements adapted with Indigenous slogans or Indigenous people on them),136–139 or form a component of a multi-faceted tobacco control program.57,140–142 Several documents have suggested general principles on which Indigenous-specific social marketing strategies could be based:27,28,86,95 These have been summarised in the document Developmental Research to inform the National Action to Reduce Smoking Rates Social Marketing Campaign.26 This research project involved conducting interviews and focus group discussions with more than 220 Indigenous people and 30 Aboriginal and non-Aboriginal health professionals from communities across Australia.28 It concluded that communications strategies in Indigenous anti-tobacco social marketing should place a strong focus on the benefits for family and kin of quitting, including emphasising the impact of the financial cost of smoking on the family, and the adverse effects of smoking on health and fitness on the individual smoker and their family. Delivery of these messages should use Indigenous faces, voices and imagery and frame the messages in a positive and inspirational way. In addition, messages should be delivered using clear, jargon-free and
regionally appropriate language, utilise local Indigenous people, use a narrative approach, and feature true stories and real people. Messages that are framed in terms of immediacy of impact (rather than a future focus) are likely to have a greater impact.28

Although there is limited research, a number of systematic reviews evaluating interventions for smoking cessation in international Indigenous populations have provided support for the use of culturally targeted messages.15,16 Several studies have documented the concerns of Indigenous people about the acceptability and efficacy of mainstream media campaigns, and discuss the need to improve the cultural and social relevance of advertisements for Indigenous people.12,27,28,86 One project in metropolitan and rural communities in Victoria documented that while older Indigenous people and Indigenous health workers believed that printed materials needed to be Indigenous specific or contain Indigenous content, many young people in the study did not necessarily agree; they reported being more likely to identify with the broader youth culture than with Indigenous culture, and commented that it made no difference to them if they were given Indigenous-specific materials.27

Revival, nurturing and continuation of Indigenous cultural heritage are strong motivating factors for some individuals and communities, and have been put forward as suitable approaches in Indigenous social marketing campaigns. In New Zealand, an anti-smoking campaign for Māori used the slogan ‘It’s about whānau’ (‘It’s about extended family’) and depicted testimonials from Māori smokers and whānau of ex-smokers; the focus was on immediate social consequences of smoking rather than future health consequences. The campaign was successfully recalled by smokers and their whānau one year after its launch, the advertisements were consistently rated as very believable or very relevant by over half of the smokers who had seen them, calls to the Quiltline increased, and 54% of the smokers stated that the campaign had made them more likely to quit.126

Highlighting the connection between not smoking, good health and survival may therefore be a salient message for some Aboriginal and Torres Strait Islander smokers.86 Although, as discussed elsewhere in this chapter, while Indigenous culture and tobacco use have long been connected, the smoking of manufactured cigarettes is an introduced activity. One project has reported that younger smokers in particular showed an interest in this message: ‘it's not part of our culture—give it back.’86

Several Indigenous community organisations in Australia have used connection to family, community and culture and the threat of smoking to these as a theme in their social marketing. Social marketing campaigns in South Australia (‘Give up smoking for good’143 and ‘Stickin’ it Up The Smokes’144 ) and the ACT (‘Beyond Today’145 ) use images of well-known community members (although not necessarily high profile or famous) along with slogans that promote the benefits of quitting for family, community and culture. Another organisation, the Kimberley Aboriginal Medical Services Council, developed posters using the slogans: ‘Stop the Smoke! You and country are one. You poison yourself. You poison your country too!’; ‘Look, listen and learn. Tobacco smoking kills’; and ‘Traditional smoking heals. Tobacco smoking kills’.142

A recent national social marketing campaign, Break the Chain,146 aimed to reduce smoking prevalence among Indigenous people, along with other disadvantaged and hard to reach groups. The campaign included TV, radio, print, and digital advertising. An evaluation of the campaign found that it achieved a high level of overall reach, with almost all Indigenous respondents exposed to at least one element of the campaign. Almost two thirds of the overall target audience had taken action as a result of exposure. Among those exposed, one third reported cutting back on the amount smoked, one quarter had discussed smoking and health with family and friends, and more than one in ten indicated they had quit smoking. Similar proportions of respondents reported intending to take action in the future as those who had taken action. These results support the receptiveness of Indigenous Australians to social marketing campaigns, and represent an ongoing opportunity for promoting behaviour change.147 In May 2016, the Commonwealth government launched a new advertising campaign targeting Indigenous smokers. The campaign, Don’t Make Smokes Your Story, encourages Aboriginal and Torres Strait Islander people to quit both for their own health, and for the health and wellbeing of their families.148

Practitioners and researchers in Indigenous tobacco action are clear that social marketing is an important component of a comprehensive tobacco action program, and that a social marketing approach should use a combination of mainstream and Indigenous-specific content and messages, at both national and regional/local levels.26 Data from the Talking about the Smokes project showed that most Indigenous smokers remembered recently seeing an anti-tobacco television advertisement, while just under half recalled targeted (featuring an Indigenous person or artwork) advertising and about one in six remembered seeing local, targeted advertising. Frequent recall of warning labels, news stories, and advertising was associated with concerns about health and wanting to quit, and this relationship was stronger for local and targeted advertising. These results support the use of both mainstream and targeted campaigns in encouraging quitting-related thoughts and behaviours among Indigenous Australians.30

8.10.11.1 Social media and mobile phones

The Internet and mobile phones offer enormous potential for the delivery of low cost and high reach cessation interventions, and a growing body of research supports their effectiveness in increasing quit rates.149,150 particularly when they are tailored or interactive151 (see Section 7.14). The potential for using digital technologies in the production and distribution of tobacco cessation and prevention messages in Indigenous communities is significant; videos and messages can be produced relatively inexpensively and distributed quickly and widely via social media websites and through mobile phone technology. The use and uptake of digital technologies by Indigenous youth is increasing rapidly, including in remote communities, although many communities still experience issues with access to communication technologies and services.152 Mobile phone messaging to disseminate smoking cessation messages and support appears to be acceptable to Māori people, including young people.153-154 A study involving Māori and non-Māori found that using mobile phones to communicate smoking cessation messages resulted in an increase in short-term self-reported quit rates, and was equally successful with Māori as with non-Māori.154

A 2014 review found that despite the considerable potential of social media and mobile phone interventions, current evidence for their effectiveness or health benefit among Indigenous peoples is sparse and mixed. The most robust evidence is in international studies exploring text messaging for smoking cessation, but a more comprehensive understanding of their role in quitting among Indigenous Australians is needed.155 The authors summarise the apps and social media programs with a focus on Indigenous Australians as follows:

<table>
<thead>
<tr>
<th>Apps and Social Media Programs with a Focus on Indigenous Australians (as at December 2014)</th>
<th>Evaluation or Evidence of Reach / Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of App or Campaign</strong></td>
<td><strong>Organisation</strong></td>
</tr>
<tr>
<td>Stickin’ it up the smokes</td>
<td>Aboriginal Health Council</td>
</tr>
</tbody>
</table>
8.10.12 Secondhand smoke

High smoking rates make exposure to secondhand smoke a health issue for many Aboriginal peoples and Torres Strait Islanders, particularly infants and children (see Section 8.7.4). Although there have been notable increases in the number of Indigenous smokefree homes over time, Secondhand smoke has been documented as an issue of concern to Indigenous smokers, particularly in relation to its effect on children. Several studies have described how smokers have implemented smokefree practices to protect the health of children and/or to support their own quitting attempts. The impact of secondhand smoke on the health of children and families has been documented as a motivator for smoking behaviour change, whether quitting, reducing the number of cigarettes smoked or smoking away from non-smokers. However, a 2015 study found that despite reporting smoke-free homes/cars, Indigenous mothers and their partners continued to smoke in the first year of their baby's lives, exposing them to secondhand smoke. An intervention involving home visits was not helpful in reducing the incidence of respiratory illness in the infants. Several other initiatives have been developed specifically for Indigenous communities around secondhand smoke, but these have not been evaluated.

Smokefree workplaces have been found in mainstream studies to reduce exposure to secondhand smoke and to reduce cigarette consumption, increase the rate of quit attempts, and reduce the rates of relapse in smokers who are attempting to quit. Smokefree policies in Indigenous health services can support other tobacco action activities by contributing to the denormalisation of tobacco use within Indigenous communities, supporting Aboriginal health workers and patients who smoke to quit, and reducing exposure to secondhand smoke. Many Aboriginal community controlled health organisations around the country have developed and implemented smokefree workplace policies. Further, research in remote North Queensland found that although many businesses lacked formal smokefree policies, many had smokefree areas or informal policies in place. Community knowledge of smokefree areas was high, suggesting that informal policies are effective among Indigenous communities.

There has been no evaluation specifically of the impact of these smokefree policies on quit rates (as they are generally one of several components of comprehensive tobacco action programs), but several services have documented the processes of developing and implementing these policies. Anecdotally, the challenges in this area are largely around implementing the smokefree policies; Aboriginal health workers have reported difficulties in requesting compliance from community members, particularly when the community has not been engaged in the process.

8.10.13 Specific sub-populations

8.10.13.1 Aboriginal health workers

A number of multi-component projects have been developed specifically to support Aboriginal health workers to quit smoking. These projects generally include a range of activities, such as providing free nicotine replacement therapy, support groups, intensive follow-up, support for families of Aboriginal health workers to quit alongside them, incentives for staff to quit, and smokefree workplace policies. Research in South Australia recommends an ecological approach to support smoking cessation among Indigenous health workers, incorporating both individual level strategies and addressing social determinants of smoking.
Reviews of mainstream studies have found that there is limited evidence for the effectiveness of school-based programs for smoking prevention among youth when the programs are based on information giving or developing general social competence, but that co-ordinated, widespread, multi-component community interventions are effective. Mass media campaigns may also be effective for young people when well researched and appropriately developed and delivered.

Smoking prevention programs aimed at children are recognised as a priority area for action by many Indigenous people. Respondents to the National Aboriginal and Torres Strait Islander Tobacco Control Project Survey felt that schools-based programs must begin in the early primary years, and should be reinforced at every year level, at every opportunity. Appropriate and appealing resources using visual, interactive, and memorable elements (such as jingles and songs) were thought to be helpful. It was also considered important to provide adequate recreational facilities and organised activities to support children through the hours when they are not at school, when key factors contributing to uptake—such as peer group pressure, concerns for personal image, and boredom—may be at their height.

However, as suggested by the evidence from the mainstream context, school-based programs alone are clearly not sufficient to address smoking uptake by young people. Particularly in communities where school attendance is sporadic, other means of conveying messages to children need to be found. The importance of family influence on smoking behaviours highlights the potential of family- and community-based interventions, which target both adults and children to impact the rates of uptake among youth. Reducing the social acceptability of smoking in Indigenous communities, and reducing smoking among significant adults who are likely to influence young people to take up smoking, should arguably receive a greater emphasis in these programs. Indigenous participants in an evaluation of the National Tobacco Campaign felt that the emphasis of tobaccocontrol programs should be on older smokers, as they felt that smoking was highest in this group, that many were suffering from smoking-related illnesses, and that they would be most likely to influence other community members, including young people, to quit.

While there have been several tobacco action initiatives that target Indigenous young people, none have been evaluated for their impact on smoking uptake. Some of these programs have been school based, while others have been community based, or part of multi-component programs. As part of a comprehensive tobacco control program in remote areas of Queensland, 10 teachers across three schools (two primary and one secondary) were trained in the Smokin' No Way program. At evaluation, none used it as intended (as a set of structured lesson plans), though seven teachers reported using some components with positive responses from students. No schools developed systems to continue use of the resource, and although it was occasionally used up to 10 months after the project, teachers thought it was unlikely that it would still be in use the following year. High turnover of teachers was suggested as a hurdle to continued use, and annual training was suggested to improve sustainability.

An analysis of Victorian data from the Australian Secondary Students' Alcohol and Drug Survey shows an association between intensive anti-tobacco campaigns and reduced prevalence of smoking among Indigenous (and non-Indigenous) school students.

8.10.13.3 Pregnant women

A review of mainstream studies found that smoking interventions during pregnancy result in reduced smoking during late pregnancy, and improved birthweight. The majority of published studies of smoking in Indigenous pregnant women are descriptive studies (see Sections 8.3.3, 8.6 and 8.7.4). There are several projects that have focused specifically on providing training and resources: the Indigenous Women’s Project through the Asthma Foundation Western Australia; the Smoke-free Pregnancy Project—Aboriginal Women and their Families through Quit South Australia; and the For Me & Bub SmokeCheck Pregnancy Project in Queensland. Pilot data from a randomised controlled trial investigating the effectiveness of a high-intensity intervention with pregnant women at three Indigenous health services in Queensland and Western Australia found no difference in smoking cessation rates between the control and intervention groups; however, the rate of smoking cessation achieved overall was 11%. Findings from the main study showed that there were again no significant differences in smoking rates between the two groups at 36 weeks. Of the women followed up, 89% in the intervention group and 95% in the usual care group were smokers. However, the authors note significant methodological limitations, which may have affected results.

A multi-component program, Green Narkwarren Ngm-toura (Healthy Family Air), was developed and evaluated in Victoria. This project involved a three-pronged approach of training health staff, improving organisational capacity and integrated support within health services, and community development. A literature review produced for this project suggested the integration of services for pregnant women into existing clinical practice, incorporating tobacco action activities into routine antenatal care practices. It also suggested a multi-component program, including tobacco action activities targeting the family and community such that a more supportive environment for quitting is created for the pregnant woman. The project was broadened to include the whole community because of the many influences that the family and community have on pregnant women. Post-implementation findings suggested that social marketing techniques are helpful for overcoming local and site-specific barriers to smokefree policy implementation, and that it is important to frame messages in terms of community and family responsibility. Provision of smoking cessation counselling and products strengthened smoking cessation messages and smokefree policies. The authors recommend that training for health professionals be strengthened by including smoking cessation experiences of Aboriginal people, and access to brief intervention and quit facilitator training should be increased for staff at Aboriginal Community Controlled Health Organisations.

A further component of programs with pregnant Indigenous women that is yet to be evaluated is the use of incentives. A systematic review and meta-analysis of research on the role of personal financial incentives in promoting healthy behaviours found that they increased smoking cessation, which was the only habitual health-related behaviour (compared with eating, alcohol consumption and physical activity) for which changes were maintained up to 18 months from intervention start and sustained after incentive removal. Several programs in other countries have shown success with using incentives to assist pregnant women to quit smoking. A review of smoking interventions with pregnant women found that the most successful intervention appeared to be the use of incentives. Another review has suggested that the use of incentives is likely to be improved by the value, the immediacy to the positive behaviour, the periodic (as opposed to one-off) delivery of the reward, rewarding support from the individual’s social network, and being part of a broader program that also builds skills and confidence. Research in a highly deprived area of England found that offering financial incentives that increased in value with duration of abstinence led to quit rates of 20% at delivery and 10% at 6 months postpartum.

The use of incentives may be a successful approach in Aboriginal and Torres Strait Islander communities, although their use is not universally supported. A roundtable of researchers and health professionals, including Aboriginal and Torres Strait Islander health workers, were generally cautious about the use of incentives and were not enthusiastic about their use in smoking cessation programs for pregnant Indigenous women. However, a NSW study involving Aboriginal and Torres Strait Islander pregnant women and health workers found good support for the use of ‘rewards for women who stop smoking with vouchers to get things for the mother or baby’: 63% among the pregnant women who smoked; and 56% among the
workers. A program related to this study aimed to help pregnant Aboriginal women in rural New South Wales to quit smoking by delivering an incentives-based program offering rewards in gradually increasing amounts until six months postpartum. These rewards were offered within a comprehensive program that also included counseling, provision of specifically designed resources, free nicotine replacement therapy for the women and those in their households, quit support groups and household resources. Of the nineteen women completing the program, sixteen made a quit attempt, and eight remained confirmed non-smokers in late pregnancy.

More generally, a 2013 systematic review of cessation support for pregnant Aboriginal and Torres Strait Islander women found that there was no evidence for any interventions that are effective. This hinders development and implementation of evidence-based policy and practice. A study exploring views of pregnant Australian Indigenous women and their antenatal care providers on strategies to support smoking cessation found that smokers were less positive about the potential effectiveness of most strategies than the providers. For example, family support was considered helpful by about two thirds of smokers and almost all providers; proportions were similar regarding the helpfulness of advice and support from health professionals. Rewards for quitting were considered helpful by about three in five smokers and providers, with smokers rating them more highly and providers rating them lower, than most other strategies. Quitline was least popular for both.

Research in 2015 found that although most pregnant Indigenous women reported receiving advice and support to quit, the persisting high prevalence of smoking suggests that this support is insufficient to overcome the many factors that promote smoking amongst this group. Increasing knowledge about antenatal smoking risks may motivate some women to try to quit; however, this alone is unlikely to address the many interacting factors that lead to and perpetuate smoking. Addressing the social environment and daily stressors, particularly those exacerbated by pregnancy, may be critical to supporting quit attempts.

8.10.13.4 Prisoners

Traditionally, there have been very high rates of smoking by Indigenous prisoners (see Section 8.3.5) along with significant challenges to providing tobacco control activities within prisons. Tobacco is a commodity that plays an important social role within prisons, and there is considerable debate over the practical and moral issues around the management of smoking within prisons, including making prisons, or even parts of prisons, smokefree. Nonetheless, all Australian states and territories except Western Australian have introduced or are planning to introduce complete smoking bans in prisons.

In the absence of total bans, smoking cessation programs should take into account the unique stresses of the prison environment. Programs should also be ongoing to accommodate the constantly changing prison population, and the changes in the readiness to quit of individual prisoners. Smoking cessation programs have been implemented within some prisons, with some specifically targeting Indigenous prisoners, but there has been little evaluation of these programs for their impact on smoking cessation. One study that evaluated a program in a New South Wales prison prior to the state-wide ban—where participants (n=30, with 50% Aboriginal) were offered a combination of bupropion, nicotine replacement therapy, brief cognitive behavioural therapy and self-help resources—found a quit rate of 26% at six months, with the rest of the participants reporting that they smoked less tobacco per week.

8.10.14 Broader legislation

State/territory and Commonwealth legislation that controls advertising and packaging, taxation and pricing, smokefree public areas, and sales has been found to be successful in the general Australian community in reducing consumption and/or access to tobacco products (see Chapter 13). However, research evaluating the impact of such legislation on smoking rates among Indigenous people is sparse. Increasing taxes on tobacco has been shown to reduce consumption in the general Australian community, and has been shown to result in a greater decline in consumption among low-income groups than among middle- and high-income groups. The National Aboriginal and Torres Strait Islander Tobacco Control Project raised some concerns about price increases causing financial stress that could in turn lead to greater levels of smoking. In a 2007 qualitative study involving community members (25) and health staff (19) in remote Northern Territory communities, perceptions of the impact of price increases were conflicting. While participants suggested that higher prices were not a disincentive to smoking, they also talked about changing their smoking behaviour and accessing a smaller number of cigarettes when money was scarce. In this same study, participants described the difficulties in remote communities of enforcing existing legislation around smokefree public places, and that the lack of other Northern Territory legislation was undermining their tobacco control efforts. Participants also reported good recall about the picture health warnings on tobacco products, but some reported disregarding these and employing strategies to avoid seeing the images.

Research on the effects of the 25% tobacco tax excise rise in 2010 on remote Indigenous communities found that there was strong overall support among Indigenous Australians for price increases as a means of reducing smoking. Participants also suggested that tax increases needed to be supported by other tobacco control activities and greater local cessation support. While findings regarding effects of the tax on consumption were inconclusive, participants did report adopting price minimising strategies, such as increased demand to share cigarettes.

There is also some research showing that plain packaging legislation appears to have similar effects on reducing pack appeal and reducing misperceptions about the relative harmlessness of cigarettes among Aboriginal and Torres Strait Islander people as the general population. One study found that, among Indigenous Australians, plain packaging had reduced misperceptions that some brands are healthier than others. Compared with pre-plain packaging, younger participants were also less likely to view some brands as more prestigious than others.

References


125. Hayward LM, Campbell HS, and Sutherland-Brown C. Aboriginal users of Canadian quitlines: An exploratory analysis. Tobacco Control, 2007; 16(suppl. 1):i60–4. Available from: http://tobaccocontrol.bmj.com/cgi/content/abstract/16/Suppl_1/i60


8.11 The relationship between tobacco and other drug use in Aboriginal and Torres Strait Islander communities

Aboriginal peoples and Torres Strait Islanders are more likely than non-Indigenous Australians not to drink alcohol at all. However, the health and social damage caused by excessive use of alcohol in some communities is immediate and highly visible, and the reason why tobacco use may be regarded as a lesser health issue and of lower urgency than other drug issues—see also Section 8.9.4. Some Aboriginal peoples and Torres Strait Islanders communities also have high rates of usage of cannabis and other illegal drugs.

The purpose of this section is to place tobacco in the context of other drug use.

Data from the latest National Aboriginal and Torres Strait Islander Social Survey show that in 2014–15, 30% of Indigenous people aged 15 and over reported having used substance/s in the past 12 months. Fifteen per cent reported drinking more than 2 standard drinks per day on average over the previous year, exceeding the 2009 national guidelines for lifetime risk (i.e., risk of alcohol-related disease or injury over a lifetime, based on more than two standard drinks on any day). Thirty per cent of Indigenous people reported exceeding the guidelines for single occasion risk (i.e., risk of alcohol-related injury arising from that occasion) by consuming more than 4 standard drinks on a single occasion in the previous year. The proportion of Indigenous people exceeding both types of risk significantly decreased from 2008, from 19% and 38% respectively. The 2008 survey also found that, like non-Indigenous smokers, Indigenous daily smokers were more likely than those who had never smoked to have drunk at chronic risky/high-risk levels and to have engaged in binge drinking (acute risky/high-risk levels) in the past two weeks. Daily smokers were also more likely to have used illicit substances in the previous 12 months.

The Australian Aboriginal and Torres Strait Islander Health Survey of 2012–13 found that 22% of Aboriginal peoples and Torres Strait Islanders reported using illicit substances in the 12 months before interview, with marijuana (19%) the most common type of illicit drugs used in the past 12 months (see Table 8.11.1). Unfortunately, comparable data on non-Indigenous rates of illicit drug use and trends over time are not available, due to conceptual and methodological differences between the various surveys. Nonetheless, despite only making up 3% of the total population, in 2012–13 Indigenous Australians comprised 14% of those receiving mainstream publicly funded treatment for alcohol and other drug (AOD) use. The following sub-sections discuss alcohol and marijuana use in greater detail as these substances are, after tobacco, the most widely used among Aboriginal peoples and Torres Strait Islanders. In addition, tobacco smoking often occurs alongside drinking alcohol and/or smoking marijuana.

### Table 8.11.1

<table>
<thead>
<tr>
<th>Substance</th>
<th>Prevalence %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other illicit or controlled substances used in the last 12 months</td>
<td>22.7</td>
</tr>
<tr>
<td>Painkillers or analgesics (used for non-medical purposes)</td>
<td>4</td>
</tr>
<tr>
<td>Amphetamines or speed</td>
<td>2</td>
</tr>
<tr>
<td>Marijuana, hashish or cannabis</td>
<td>19</td>
</tr>
<tr>
<td>Kava</td>
<td>1.3</td>
</tr>
<tr>
<td>Used substances but not in the last 12 months</td>
<td></td>
</tr>
<tr>
<td>Had never used illicit substances</td>
<td>51.8</td>
</tr>
</tbody>
</table>

Source: ABS and AIHW 2015

### 8.11.1 Alcohol

In 2014–15, as mentioned above, 15% of Aboriginal and Torres Strait Islander people exceeded lifetime risk guidelines for alcohol consumption, while 30% exceeded single occasional risk guidelines. People living in remote areas were significantly more likely to report drinking more than 2 standard drinks per day on average over the previous year than those in non-remote areas (18% and 14%, respectively), while proportions of those who exceeded the guidelines for risk of single occasional harm were similar (30% and 32%). Aboriginal and Torres Strait Islander men were almost three times as likely as women to have exceeded the lifetime risk guidelines (22% compared with 8%), and were almost twice as likely to have exceeded the single occasion risk guidelines (39% compared with 21%). Figure 8.11.1 shows these patterns by age group.
The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey showed that Indigenous people who had completed year ten or lower were significantly less likely to report binge drinking in the prior year than those who complete year 12 (54% and 61%, respectively), while proportions were similar for lifetime risk (21% and 18%). Indigenous Australians who reported not participating in the labour force were significantly less likely to drink at occasional or lifetime risky levels than those who were currently either employed or unemployed. The 2008 National Aboriginal and Torres Strait Islander Social Survey showed that those who reported risky/high-risk binge drinking were more likely to be current daily smokers compared to those who drank at low risk levels (59% compared to 33%). Similarly, those who drank at chronic risky/high-risk levels were also more likely to be current daily smokers than those drinking at low risk levels (63% compared with 46%).

In 2012–13, Indigenous Australians were significantly less likely than non-Indigenous people to report having consumed alcohol in the previous 12 months, and significantly more likely to report that they had never consumed alcohol. Adjusting for age, rates of lifetime risky alcohol consumption were not significantly different from rates for non-Indigenous people (18% vs. 19%). Indigenous people were significantly more likely (1.1 times as likely) to have exceeded the guidelines for single occasion risk; however, this difference only remained true for women, with Indigenous women 1.2 times as likely as non-Indigenous women to report drinking at this level. For men, the difference was non-significant.

Studies comparing alcohol use between Indigenous and non-Indigenous teenagers have shown varying results. Data from the 2009 Victorian Adolescent Health and Wellbeing Survey (a school-based survey in years 7, 9 and 11) showed that while similar levels of Aboriginal and non-Aboriginal young people had ever drunk alcohol (71.3% and 61.9% respectively), Aboriginal young people were more likely to have had five or more alcoholic drinks in a row in the last two weeks (37.8% compared with 18.3%). Similarly, a 1996 survey of New South Wales Indigenous students aged 12–17 found that they were about as likely as non-Indigenous students to report weekly drinking of alcohol, but were twice as likely to report hazardous drinking.

Other studies among youth, however, show that Indigenous young people are either less likely or about as likely to have experimented with alcohol or to have drunk frequently/to excess as non-Indigenous young people. The findings of two of these studies indicate that Indigenous young people have been compared to non-Indigenous surveys that are not directly comparable (due to timing of their administration, methodology or the questions asked), although they do give a broad indication.

The Western Australian Aboriginal Child Health Survey reported that those young people who drank alcohol but not to excess were four times more likely to smoke regularly than young people who did not drink at all, and young people who drank to excess were 4.5 times more likely to smoke than those who did not drink.

8.11.2 Cannabis (marijuana, hashish, 'ganja' or 'yamdi')
As reported above, marijuana was the most common type of illicit drugs used in 2012–13 by Indigenous Australians, with use in non-remote areas slightly higher (19%) than in remote areas (17%).

Cannabis use among smokers was reported in older surveys; in 2008, of current daily smokers aged 15 years and over, 26% reported using marijuana in the last 12 months, compared with 9% of ex-smokers and 5% of those who had never smoked. The National Aboriginal and Torres Strait Islander Health Survey 2004/05 found that 46% of Indigenous smokers in non-remote regions aged between 18 and 34 had used marijuana, hashish or cannabis resin in the past year, compared with 16% of Indigenous non-smokers.

Other research suggests that level of usage may be higher still in some communities. A 2000–01 study from eastern Arnhem Land (in the 'Top End' of the Northern Territory) found that 70% of Indigenous males and 59% of females were current users of cannabis. Of those who were current users, 61% used it weekly or more often, and few who had ever used cannabis had quit (7%).

Cannabis use was strongly associated with tobacco use. Current tobacco smokers were about three times as likely to use cannabis as were non-smokers, and a third of those who had ever used both cannabis and tobacco began using the substances at or near the same time. Most current cannabis users (84%) were also using tobacco; the favoured method of cannabis use was to combine it with tobacco, the mixture commonly being smoked via a bucket bong, allowing a number of users to share. Some communities may be spending between 31% and 60% of their weekly income on cannabis; combining it with less expensive tobacco prolongs the supply.

This study concluded that cannabis use helped reinforce continued tobacco use, that widespread adoption of using cannabis in combination with tobacco could have serious health consequences, and that joint dependence on these substances provided a major challenge to communities and to those working in public health. Longitudinal research in Arnhem Land (from 2001 to 2005–06) found that most of those who reported cannabis use at baseline again reported current use at follow up. However, tobacco use did not predict cannabis use. The Cape York Cannabis Project found that in 2010–11, 66% of males and 30% of females interviewed were current users, 12% of males and 31% of females were former users and 22% of males and 39% of females had never used cannabis. Almost all current cannabis users (97%) were also users of tobacco.

Studies of illicit drug use among Indigenous teenagers show varied results. The Victorian Adolescent Health and Wellbeing Survey (2009) found no significant difference between the proportions of Aboriginal and non-Aboriginal young people who had ever used illicit drugs.

Likewise, a comparison of data from the 2000–02 Western Aboriginal Australian Child Health Survey and the 2002 Australian Secondary Students' Alcohol and Drug Survey found that similar proportions of Indigenous and non-Indigenous young people in Western Australia had used marijuana at some time (30% and 31% respectively), and in the previous week (11.9% and 9% respectively).

On the other hand, a 1996 survey of school students aged 12–17 in NSW found that Aboriginal students were 1.6 times more likely to have ever tried cannabis than non-Aboriginal students. The Western Australian Aboriginal Child Health Survey found that young people who used marijuana weekly or more often were 11 times more likely to smoke than those who did not use marijuana.

The National Aboriginal and Torres Strait Islander Tobacco Control Project also found that cannabis was widely used among various Aboriginal and Torres Strait Islander communities, and that its use was closely connected with tobacco use. It was commonly reported that cannabis was mixed with tobacco, and that even if the primary aim was to use cannabis, tobacco addiction would result. While some communities felt that the relationship between tobacco and cannabis was so interconnected that one could not properly be addressed without the other, communities expressed the view that the importance of cannabis use and its illicit status meant that it was best dealt with as a separate issue. These matters are clearly for individual communities to decide.

There may also be widespread misconceptions about the health effects of cannabis use. The National Aboriginal and Torres Strait Islander Tobacco Control Project study found that many respondents perceived cannabis as more 'natural' and hence less harmful than manufactured tobacco products. The health consequences of cannabis use are discussed in Chapter 3, Section 3.32.2.

References
1. Lindoff KJ. Tobacco time for action: National Aboriginal and Torres Strait Islander tobacco control project final report. Canberra, Australia: National Aboriginal Community Controlled Organisations, 2002.


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8.12 The tobacco industry and Indigenous communities

Given the strong consumer base they provide, it is not surprising that Aboriginal peoples and Torres Strait Islanders have been targeted by tobacco industry marketing practices, along with other vulnerable and disadvantaged populations. A former tobacco model recounted during a court case against a tobacco company what he was told by a tobacco company executive: ‘We don’t smoke the shit. We just sell it. We reserve the right to smoke for the young, the poor, the black, and the stupid’ (p 26).

With direct tobacco advertising in Australia now being a thing of the past, tobacco companies have found other ways to promote goodwill towards themselves and their products among Indigenous communities. One company supported an Indigenous football team by donating a percentage of every dollar spent on a particular brand towards buying football guernseys for the team. In 2001, Philip Morris Australia provided funds to the Victorian Aboriginal Education Association Incorporated for the development of materials about substance use. Sponsorships of this nature could provide the impression that tobacco itself is not a cause for concern compared with other drug misuse, and might also influence the willingness of communities to take up and support tobacco-control initiatives.

There is anecdotal evidence that the close connection for many rural Indigenous people with cattle farming has made the Philip Morris brand Marlboro, with its iconic symbol of the smoking cowboy, a popular brand choice. Winfield, manufactured by British American Tobacco (formerly Rothmans), has also long been associated with the iconic working man through its launch using popular actor Paul Hogan in the 1970s. Winfield has also been a leading brand used among Indigenous people; in the APY lands in Central Australia in 2007, 90% of the market share was held by Winfield (compared to 31.7% in the national market). The tobacco industry has also at times used offensive promotional materials, or misused Indigenous imagery, to promote its products. In 1984, an elected Aboriginal organisation (the National Aboriginal Conference; NAC) alleged that an advertisement for John Player Special cigarettes (owned at that time by WD & HO Wills) was racist. The advertisement included a picture of the black cigarette pack with the words “Get your own black”, which alluded to owning black servants. NAC were successful in its claim against the company, which was forced to withdraw the advertisement. Rothmans used the image of an Australian Indigenous man playing the didgeridoo in an advertisement for its Winfield brand, launched in Germany in 1998. One billboard depicted an Aboriginal man playing a didgeridoo with the slogan “Australians’ answer to the peace pipe”. Rothmans justified the advertisements by claiming that Winfield was itself an iconic Australian brand, while Aboriginal spokespeople from the National Aboriginal Community Controlled Health Organisation and the Australian Medical Association described the images as demeaning misrepresentations. In 2005 Philip Morris launched a brand in Israel called Maori Mix, which incorporated ‘quasi-Māori’ emblems and a map of New Zealand on the packaging. The exploitation of Australian and New Zealander Indigenous peoples, among whom tobacco is a leading cause of death and disease, attracted immediate criticism. The Māori people received an apology.

In New Zealand, resistance to exploitation by the tobacco industry is part of the messages delivered by Māori anti-tobacco advocates. Underpinning a series of campaigns—entitled ‘Māori Killers’, ‘Endangered Species’ and ‘Māori Murder’—is the idea that the tobacco industry profits from Māori tobacco-related illness and death, and tobacco is a ‘barrier to Māoridom fulfilling its full potential’. This approach has not been widely used by Aboriginal peoples and Torres Strait Islanders in Australia.
References


8.13 Policies for advancing tobacco control programs among Aboriginal peoples and Torres Strait Islanders

Although health practitioners, community members and researchers have been working for many years to reduce tobacco use in Aboriginal and Torres Strait Islander communities, the delivery of tobacco action programs in these communities has until recently typically been marked by a lack of coordination and limited resources.\(^1\)\(^-\)\(^8\) In 2008, the Tackling Indigenous Smoking Initiative was announced, which represented a significant commitment to a strategic approach to Indigenous tobacco action with accompanying funding; however, the 2014 budget saw the program’s funding cut by $130 million over five years—more than a third of the annual funding.\(^5\) The redesigned Tackling Indigenous Smoking program has a budget of $116.8 million over three years until 2018 (see Section 8.13.5).

To date, critical evaluations of the various programs that have been undertaken among Aboriginal and Torres Strait Islander communities have been sparse, or limited by small sample size and problems with research design. While there is an extensive literature about tobacco (health promotion) initiatives aimed at reducing prevalence in other populations and their effectiveness, there is a paucity of evidence that considers the appropriateness and transferability of such initiatives to Aboriginal and Torres Strait Islander contexts.\(^1\)\(^,\)\(^8\)\(^,\)\(^10\)\(^-\)\(^12\) A systematic review of trends in Indigenous Australian tobacco research from 2004 to 2013 found that, despite a surge in research output in 2008 relating to Indigenous tobacco control, there are still few intervention studies available to guide efforts to reduce tobacco-related health disparities.\(^13\) Rigorous evaluations, particularly of secondary prevention programs and comprehensive community-wide programs, are needed to build the evidence base around tobacco action initiatives in Aboriginal and Torres Strait Islander communities.\(^14\)

Despite the limited evidence about what works in Indigenous tobacco control,\(^14\)\(^,\)\(^15\) several reviews have identified the likely factors critical to the success of designing appropriate tobacco initiatives for Aboriginal and Torres Strait Islander communities.\(^1\)\(^,\)\(^8\)\(^,\)\(^10\)\(^,\)\(^11\)\(^,\)\(^15\)\(^-\)\(^17\) Important principles that should underpin tobacco action in Aboriginal and Torres Strait Islander communities to enhance program delivery include:\(^5\)\(^,\)\(^6\)\(^,\)\(^8\)\(^,\)\(^10\)\(^,\)\(^18\)\(^-\)\(^20\)

- Maximising community control, and building capacity within Indigenous organisations and communities
- Understanding and respecting the social context in which Aboriginal peoples and Torres Strait Islanders live their lives, and ensuring that this is reflected in programs that include a focus on family and community
- Developing programs that are holistic in nature and consider the social determinants of health
- Drawing on existing theory and research to ensure messages and approaches are evidence-based
- Ensuring that tobacco action programs are as comprehensive as possible within given resources
- Evaluating all programs with a view to building the evidence of best practice in Indigenous tobacco action
- Making sufficient and ongoing funding available to develop sustainable long-term programs
- Building cooperative relationships across sectors, while always being mindful of maintaining Indigenous community control within these relationships.

A 2016 systematic review examined strategies to reduce commercial tobacco use in Indigenous communities globally. The authors concluded that the breadth of research indicates a growing prioritisation and readiness to address the high rates of smoking among Indigenous people. A comprehensive approach comprising multiple activities, Aboriginal leadership, long-term community investments, and the provision of culturally appropriate health materials and activities appear to be important elements for promoting positive change.\(^21\)

This section will summarise the current evidence around successful tobacco action interventions in the Australian Indigenous context, and provide examples of programs and activities that have been (and are being) implemented in Aboriginal and Torres Strait Islander communities. The examples given are not exhaustive, and readers interested in knowing more about particular programs in Aboriginal and Torres Strait Islander communities are referred to online resources that provide updated information on programs around the country.\(^1\)

8.10.1 Considering the context to develop relevant tobacco action programs

If smoking is understood as a ‘socially and culturally patterned behaviour’, then differences between Indigenous and non-Indigenous communities in history, social and cultural background and attitudes to health suggest that initiatives that have shown success elsewhere may not all be transferable to Indigenous contexts without at least some degree of modification.\(^12\) In addition, there are many nations within Australian Aboriginal peoples in which the cultures and social practices vary considerably, therefore a ‘one size fits all’ program is unlikely to be successful. Tobacco action within Aboriginal and Torres Strait Islander communities must incorporate approaches that take into account the socio-economic realities of people’s lives and the unique social and cultural contexts, as well as considering how to overcome challenges within the healthcare delivery system that may contribute to reducing the effectiveness of tobacco action initiatives.
The impacts of socio-economic factors on smoking rates for Aboriginal peoples and Torres Strait Islanders have been discussed in Section 8.3. Clearly, tobacco action initiatives must take into account the underlying socio-economic realities facing many Indigenous people, and work towards addressing broader social disadvantage. However, it should be noted that the causal pathways between specific variables of socio-economic disadvantage (such as income, education, employment and housing) and smoking are not clear; the pathways are, in fact, likely to be highly complex and interconnected. Simply addressing one or another of these variables is unlikely to have an impact on smoking rates by itself.22

These socio-economic factors also contribute to the complex stressors that Aboriginal peoples and Torres Strait Islanders may face in their daily lives. Smoking is commonly perceived as a means of coping with stress (see Section 8.9.1.1).23 However, smoking appears to increase stress levels,24 while quitting is associated with reduced stress, depression, and anxiety,25 therefore, an additional benefit of cessation may be improving the mental health of Indigenous peoples.

Socio-economic factors alone are not, however, sufficient to be driving high rates of smoking in Aboriginal and Torres Strait Islander communities. While smoking does increase along with socioeconomic disadvantage among Indigenous peoples, an analysis of the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) found that even among those in the highest quintile of household income, smoking prevalence was still at 37%, compared to an overall prevalence of about 51%.22 Clearly, social and cultural factors also play a role in promoting smoking26 (see Section 8.9.1.2). Given the influence of extended family relationships in the uptake and prevalence of smoking, as well as in quitting, family-centred initiatives based in the home and community are likely to be an influential part of tobacco action programs in Indigenous communities.26 In addition, community esteem and respect for elders and older community members means that supporting them to quit may contribute to initiating more widespread declines in smoking behaviour through role modelling.27

Some argue that mainstream public health messages lack relevance for many Indigenous people,12,27,28 Several studies suggest, however, that many mainstream tobacco action activities are acceptable to and effective for Aboriginal peoples and Torres Strait Islanders (see Section 8.10.11).12,29,30 While modifications of programs may be important, the role of the health system in reducing the effectiveness of tobacco action programs should not be overlooked.12 Barriers in the health system that can affect program efficacy include: workforce turnover; lack of staff training opportunities; the orientation of services towards acute rather than preventive care; and access to and availability of appropriate health services and treatment for Indigenous people (see Sections 8.10.4 and 8.10.5). Adequate and sustained funding to the healthcare system specifically for Indigenous people and specifically directed towards tobacco action has also been cited as necessary for program success.5,8,31

8.10.2 Taking a comprehensive approach

Comprehensive tobacco action programs that are likely to have the greatest success in Aboriginal and Torres Strait Islander communities are multi-component, take a whole-of-community approach, are integrated across different activities within health services, and work across different sectors within communities. In mainstream programs, it is well understood that addressing one part of tobacco control in isolation reduces the chances of success.32 For example, the benefits of producing salient health messages are diminished if appropriate training for health staff to provide further information and support in quitting is not provided. Offering access to pharmacological aids to cessation in the absence of creating a supportive structure in which cessation can occur is similarly unlikely to succeed.32 It is likely that a cumulative effect of exposure to low-level or indirect anti-smoking and tobacco actions delivered as part of a comprehensive tobacco action program may affect Indigenous smokers quitting by themselves; some studies have noted high levels of Indigenous smokers who have quit without the use of organised programs or specific help.33,34

It is also important not to treat tobacco use in isolation. Strategies intended to reduce smoking rates will not be effective if planned without reference to community-identified health priorities such as alcohol and other drug misuse, violence, education and employment. As with other disadvantaged groups, raising standards of living and improving educational and employment opportunities can be expected to enhance overall health outcomes, as well as bringing about declines in smoking. Tobacco interventions need to be part of a multi-level approach that recognises the broader social, economic, and cultural environment of communities.35 Equally, effective tobacco control strategies that reduce uptake and promote cessation can help address many of these problems, for example by improving mental health25 and relieving financial stress.36

Such multi-level, comprehensive approaches are consistent with the principles of Indigenous community-controlled primary healthcare and with a holistic view of health. This concept, where health is ‘not just the physical well-being of the individual, but the social, emotional and cultural well-being of the whole community’.37 and that all aspects—community, land, mind and spirit, the physical and spiritual—are interconnected and interdependent, means that consideration of one element cannot meaningfully occur in isolation from the others.38 This world view underpins the delivery of healthcare by Aboriginal Community Controlled Health Organisations that ideally focus on comprehensive, integrated and preventive approaches within a framework of community control and self-determination.39

Many multi-component tobacco action programs have been, or are currently being, implemented in Aboriginal Community Controlled Health Organisations and in Aboriginal and Torres Strait Islander communities. These include: the Tobacco Project,40,41 the Top End Tobacco Project (Northern Territory),42,44,45 Clean Air Dreaming (New South Wales);46 Building Research Evidence to address Aboriginal Tobacco Habits Effectively (BREATHE),47 and Tobacco Resistance and Control (A-TRAC) Program (Aboriginal Health and Medical Research Council of New South Wales);48 Our Space Smoke Free (Queensland);49 Deadly Nungas Say No to Puya (South Australia);50,51 Northern Territory Tobacco Project;51 Goren Nankwarren Ngm-toura (Healthy Family Air) (Victoria);7 Stop Smoking in its Tracks (New South Wales);53 Beyond the Big Smoke (Western Australia);54,55 Be Our Ally Beat Smoking (Western Australia);56 Reducing Aboriginal Children’s Tobacco Exposure in the Pilbara.57 The Smokers Program (Maari Ma Health Aboriginal Corporation—New South Wales);58,59 No Smokes North Coast (New South Wales);60 the No More Boondah Program (ACT);61 Gippsland Tobacco Action & Healthy Lifestyle Team (Victoria);61 and tobacco control programs at Miwaj Health Aboriginal Corporation,62 Kimberley Aboriginal Medical Services Corporation, the Tasmanian Aboriginal Corporation,64 and in remote north Queensland.65 This list is not exhaustive, and there are many other organisations working on tobacco action projects (see footnote i).

These projects include a selection of the following components:
- brief interventions
- specialised tobacco action workforce
- increased health care check-ups and subsequent referral advice
- training for the workforce (both specialised and general) in tobacco action, including in brief intervention
Many of the multi-component tobacco action programs listed above have not been evaluated; others have been evaluated, but are not yet published. Published evaluations of multi-component projects in the Northern Territory and North Queensland have found no measureable impact on smoking cessation, although one of the Northern Territory studies found increases in knowledge of the health effects of tobacco and readiness to quit. This and another Northern Territory study also found that those communities with the most tobacco action activity measured the greatest decline in tobacco consumption. Importantly, the evaluation of the North Queensland Indigenous Tobacco Project found that health services and communities felt that they had minimal ownership and input into the project, and this may have affected the limited overall impact that the program had. The success of community-based multi-component programs relies on community ownership, and involvement in the development, implementation and evaluation of these programs.

Other research has shown greater promise for multi-component programs. Evaluation of a complex, community-based tobacco control program implemented in eight remote north Queensland Indigenous communities found that, despite considerable shortcomings in delivery of the various components, there was a significant decline in smoking and consumption. The Be Our Ally Beat Smoking (BOABS) study tested the effectiveness of a locally-tailored, intensive, multidimensional smoking cessation program provided by trained Aboriginal researchers. Twelve months after enrolment, the smoking cessation rate for participants in the program (n = 6), while not statistically significant (possibly due to the small sample size), it was double that of usual care. A project at the Maari Ma Health Aboriginal Corporation involved an intensive 12-week Smoker’s Program with a case manager and an individualised management plan (including nicotine replacement therapy and other pharmacotherapies, counselling support, referral to quitline and ongoing support) delivered in the context of other health service activities such as brief intervention training for all staff (even non-clinical staff), and the implementation of smokefree workplace policies. Within the context of these other activities, the Smoker’s Program appears to have been successful at promoting quit attempts among participants; 16.3% of Aboriginal people who had ever participated in the Smoker’s Program (up to June 2009) had a ‘quit’ status at 12 months after entering the program.

8.10.3 Harm reduction approaches

Roche and Ober have argued that adoption of harm reduction strategies might usefully increase the range of initiatives open to health workers in Aboriginal and Torres Strait Islander communities. Harm reduction places a priority on limiting damage caused by tobacco use, rather than making cessation the primary goal. In societies where tobacco use is endemic and barriers to quitting complex, it may be that the pragmatic approach offered by harm reduction is more likely to deliver measureable health benefits. Cutting down on the number of cigarettes has been reported by Indigenous smokers, particularly in studies of pregnant smokers, as a conscious strategy to reduce tobacco-related harm; however, this approach is not recommended by peak public health organisations, as the long-term health benefits of a reduction in smoking is unclear. Cutting down, particularly when combined with nicotine replacement therapy, appears to be more useful as a step toward quitting.

Elements of harm reduction in relation to tobacco use might include increasing ease of access to treatment, protecting non-smokers (e.g. by introducing smokefree areas), and monitoring for early signs of smoking-related illness. Roche and Ober contend that given the damage tobacco causes among Aboriginal and Torres Strait Islander communities, it is likely that any potential gains accrued from adoption of a harm minimisation approach would outweigh possible disadvantages. However, they underline the need for monitoring and evaluation of any strategies, particularly the importance of allowing particular communities to develop their own programs.

8.10.4 Roles of health services

Smoking cessation activities are available to Aboriginal peoples and Torres Strait Islanders through a variety of health service contexts: Aboriginal community controlled health services, pharmacies, and general practitioners. Recent developments in Aboriginal health policy and funding have been strategically directed within these sectors to address chronic diseases and risk factors such as smoking.

Many Indigenous people access healthcare primarily through Aboriginal community controlled health services. These organisations are largely governed and managed by Indigenous people from the local community, and employ Aboriginal health workers to assist in the delivery of holistic, comprehensive, and culturally relevant healthcare. Aboriginal community controlled health services have an important role to play in implementing smoking cessation activities, but the nature of these activities, and their capacities to deliver them, vary from location to location. Smoking cessation programs may include: clinical level activities such as brief interventions, nicotine replacement therapy provision and support programs; and preventive activities within the health services, such as health education, social marketing, and the development of supportive workplace policies. Staff from Aboriginal community controlled health services may also become involved with supporting broader community-level initiatives, such as developing local social marketing campaigns, policies around smokefree community areas, or programs delivered through schools, stores or other organisations. Many health services are also specifically implementing programs and activities to support their staff to quit smoking (see Section 8.10.13.1).
A number of studies have documented the service capacity issues faced in delivering tobacco control programs within Aboriginal community controlled health services.\textsuperscript{12,31,35,63,74} Traditionally, many health services have found it difficult to prioritise tobacco control as there are so many other competing and immediate health and social issues; service delivery have often placed a disproportionate focus on acute biomedical healthcare rather than on preventive healthcare.\textsuperscript{12,35,74} Some health workers report that there is not enough time to build relationships with patients that are sufficiently robust to enable them to raise what they see as sensitive and confronting lifestyle issues (such as smoking).\textsuperscript{74} Health service staff involved in one study suggested adult health checks as an enabler to conducting brief interventions, but several services in this study had found it difficult to incorporate adult health checks into their work practice.\textsuperscript{74} Other service capacity issues include: the capacity (particularly time and resources) to provide and support adequate training;\textsuperscript{12,74} high staff turnover and difficulty retaining skilled staff;\textsuperscript{31,35,74} inadequate resourcing to sustain activities;\textsuperscript{31} lack of infrastructure to adequately provide programs;\textsuperscript{74} and lack of follow-up services to which to refer patients.\textsuperscript{83}

Taking a team approach to healthcare delivery;\textsuperscript{12} and strong and consistent leadership\textsuperscript{74} have been recognised as enablers to implanting cessation interventions. One study found that where the community is ‘ready’ to respond to smoking—i.e. tobacco control has been identified as a priority, key stakeholders are mobilised, and staff have been made available to implement activities—tobacco control activity is more likely to occur.\textsuperscript{31} Indeed, national surveys of Aboriginal community-controlled health services (ACCHS) in 2012–13 found that most prioritised tobacco control “a great deal” or “a fair amount”, and this translated to smokefree policies, staff training in tobacco control, extra smoking cessation support for staff, and the provision of a range of quit-smoking information and activities for clients and the community.\textsuperscript{75}

While Aboriginal community controlled health services are central in the delivery of healthcare to Aboriginal peoples and Torres Strait Islanders, many Indigenous people will access mainstream services—i.e. those without Indigenous structures of governance. The effectiveness of such services may be limited by factors such as cost, reduced cultural safety, language barriers, and racism (whether perceived or actual). It is crucial that mainstream services are well equipped, through appropriate training, funding, and referral relationships, to work with Aboriginal and Torres Strait Islander clients. For example, the Practice Incentives Programs Indigenous Health Incentive provides financial incentives for general practices to manage complex chronic disease issues for Indigenous patients, and the Pharmaceutical Benefits Scheme Co-payment Measure enables the subsidisation of medications (including nicotine replacement therapy and other pharmacotherapies) for the prevention or management of chronic diseases.\textsuperscript{76} Hospitals can also provide support to Indigenous inpatients who have been identified as smokers, for instance by informing them of the hospital’s smokefree policy, advising and supporting them with options for managing nicotine withdrawal during their stay, and offering them further support after discharge.\textsuperscript{77} High-intensity cessation support has been found to result in higher quit rates in other populations,\textsuperscript{78} and could also be successful for Aboriginal peoples and Torres Strait Islanders.\textsuperscript{1}

Smoking cessation activities are available to Aboriginal peoples and Torres Strait Islanders through a variety of health service contexts: Aboriginal community controlled health services, pharmacies, and general practitioners in community or government health services and private practice. Recent developments in Aboriginal health policy and funding have been strategically directed within these sectors to address chronic diseases and risk factors such as smoking.\textsuperscript{80,81}

### 8.10.5 Roles of Aboriginal health workers

Aboriginal health workers are critical to the delivery of primary healthcare interventions and therefore play an important role in addressing smoking in communities. However, they face very particular challenges in delivering tobacco action activities. Such workers often come from and reside in the communities where they work.\textsuperscript{79} Since they are part of the same social context as their client base, it is not surprising that they also have comparatively high smoking rates (see Section 8.3.4). The nature of the work and the workload is also stressful, given that they are immersed in communities with high health and welfare needs, operate within time and resources constraints, and have specific social expectations placed upon them by family and community members.\textsuperscript{80} The stress and grief that accompanies their work makes it more difficult for Aboriginal health workers who smoke to quit themselves,\textsuperscript{81} and also provides a challenging work environment within which to deliver smoking cessation activities.

Studies report varying rates of Aboriginal health workers asking clients about their smoking status and talking to clients about cessation. One Western Australian study of 36 Aboriginal health workers reported that one-third asked all of their clients if they smoked, but just over a quarter asked none.\textsuperscript{82} In a New South Wales study involving 98 Aboriginal health workers, 80% reported providing quit smoking advice in their professional capacity.\textsuperscript{83} However, while most Aboriginal health workers in a qualitative study in Western Australia (n=10) reported routinely asking their pregnant clients if they smoked, very few followed this up with specific cessation advice.\textsuperscript{83} Another study with Indigenous pregnant women found that while most had been asked by a health worker during their antenatal care if they smoked (95%), fewer had been given advice to stop smoking (83%), and even fewer had been offered support to stop smoking (65%).\textsuperscript{84} The National Aboriginal and Torres Strait Islander Tobacco Control Project also found that fewer than half of surveyed health staff reported that they had discussed tobacco with clients.\textsuperscript{18} More recently, among a national sample of Aboriginal and Torres Strait Islander smokers and recent ex-smokers surveyed in 2012–13, almost all daily smokers who had seen a health professional in the year prior recalled being asked if they smoke, and three quarters were advised to quit. This advice was associated with making a quit attempt.\textsuperscript{85}

Aboriginal health workers may face a range of barriers that hinders their capacities to provide smoking cessation advice, which include high prevalence rates, community attitudes to smoking, and their levels of confidence, knowledge and skills to deliver tobacco control activities. The lower relative priority of smoking when compared to other more urgent health and social issues affecting clients’ lives (including from other more immediately damaging alcohol and drug misuse) affects the extent to which health workers prioritise smoking cessation in the clinical context, and their capacity to undertake preventive activities in tobacco control.\textsuperscript{35,63,81} Looking from the perspective of the client rather than the health worker, The Forgotten Smokers reported that smokers felt they had limited access to health workers, and that health workers were generally too busy caring for people with acute health problems to have the time to talk about smoking.\textsuperscript{86} The need for a specialised tobacco action workforce is widely recognised as a way to improve the capacity of services to deliver tobacco action activities,\textsuperscript{5,12,87} and forms the backbone of the response under the Tackling Indigenous Smoking program.\textsuperscript{73}

There is a consistent view across various geographical settings that high rates of smoking among Aboriginal health workers may affect their confidence and capacity to offer smoking cessation advice to their clients.\textsuperscript{27,35,79,82,83,88} A small Western Australian study reported that compared with Aboriginal health workers who smoke, those who are non-smokers and ex-smokers are more likely to advise smokers to quit and to provide warnings about the
detrimenial health effects of smoking.\textsuperscript{82} Similarly, a national survey of staff of Aboriginal community-controlled health services found that ex-smokers were most likely to report being confident in talking to others about smoking and quitting.\textsuperscript{59}

Health workers who smoke may feel hypocritical or as though they lack credibility when providing cessation advice, particularly if they have unsuccessfully attempted to quit.\textsuperscript{27,88} Aboriginal health workers have reported that if they could quit themselves, they would feel more confident speaking to community members about quitting.\textsuperscript{100} They have also expressed desire for support in the workplace to quit, such as nicotine replacement therapy, quit groups and quit buddies.\textsuperscript{96} However, research from New South Wales has shown that some health workers who were non-smokers also felt uncomfortable discussing smoking, since they lacked personal experience of tobacco addiction and making quit attempts.\textsuperscript{53} Another study in Western Australia reported that two non-smoking Aboriginal health workers (of 36 total participants) felt uncomfortable talking to clients about cessation as they worked with colleagues who smoked and so did not want to appear hypocritical by association.\textsuperscript{62}

Aboriginal health workers (whether smokers or non-smokers) have also expressed concern that discussing smoking cessation could be perceived by their clients as judgemental and moralising.\textsuperscript{35,63,82,90} Health workers have reported being concerned about making their clients feel badly about themselves by raising smoking cessation, particularly when so many other health and social issues are affecting them.\textsuperscript{35,63} Some Aboriginal health workers have reported discomfort at providing smoking cessation advice to elders or respected family members,\textsuperscript{12,35,82,91} and some are also worried that raising smoking will damage the therapeutic relationship and discourage patients from returning for ongoing healthcare.\textsuperscript{63,74} They have reported attenuating this discomfort by using less confrontational strategies for talking to people about smoking, including speaking about the general effects or talking about reducing passive smoking around children.\textsuperscript{53} However, while Aboriginal health workers have these concerns, their clients do not necessarily agree. One study with pregnant Indigenous women in New South Wales found that 80% of the women thought that healthcare workers should advise pregnant women to quit.\textsuperscript{84} There is also strong support among Aboriginal communities for smokefree Aboriginal community-controlled health services, with national surveys showing that 87% of non-smokers, 85% of ex-smokers, and 77% of daily smokers support a complete ban on smoking inside and around the buildings.\textsuperscript{75}

Studies and workshops examining workforce issues in Indigenous tobacco control cite lack of knowledge, skills and training as other reasons for not providing information to promote quitting.\textsuperscript{14,18,35,50,82,83,86,90,92–95} While smoking is part of the competencies in Aboriginal health worker training, how this is actually taught varies from provider to provider. A survey of training providers found that most taught general information about tobacco use, but few provided skills-based training in facilitating quit groups or in using nicotine replacement therapy. Additional resources were needed for both Aboriginal health workers and the trainers.\textsuperscript{94} Another study supports this finding that training should cover more than simply brief interventions, and include information about addiction, motivational interviewing and the use of pharmacotherapies.\textsuperscript{82} Indigenous-specific packages to deliver brief intervention training have been developed (see Section 8.10.6), and other training packages and toolkits have been developed around the country.\textsuperscript{95,96}

### 8.10.6 Brief interventions and brief intervention training

Brief interventions delivered by health professionals are effective in reducing smoking prevalence in various mainstream settings,\textsuperscript{97–99} and are quick, inexpensive and non-invasive to deliver.\textsuperscript{8} There have been no studies specifically evaluating the efficacy of brief interventions delivered to Aboriginal peoples and Torres Strait Islanders, particularly when delivered by Aboriginal health workers. A number of evaluations have included brief interventions or individual counselling as part of the overall delivery of treatment,\textsuperscript{33,66} but it is difficult to assess the contribution of brief interventions to cessation rates. A qualitative study involving interviews with 25 residents of remote Northern Territory communities reported that for those with a smoking history (15 current smokers, six ex-smokers, two recently quit smokers) brief interventions from Aboriginal health workers were influential in their decision to quit, particularly when provided in the context of acute health events.\textsuperscript{12}

In mainstream settings, training health professionals in providing smoking brief interventions has been shown to have a measurable effect on their professional practice; they are more likely to identify smokers and to provide them with smoking cessation advice than untrained professionals.\textsuperscript{100} Even when doctors merely provide brief, simple advice about quitting, this increases the likelihood a smoker will successfully quit and remain a non-smoker 12 months later.\textsuperscript{101}

In Indigenous contexts, training programs such as SmokeCheck have been rolled out in several states to address the lack of skills and confidence that health workers face in delivering smoking cessation advice and tobacco programs. SmokeCheck has been adopted in Queensland, New South Wales, South Australia and Western Australia, and evaluated in Queensland and New South Wales.\textsuperscript{90,102} The evaluation of the New South Wales SmokeCheck program found that there were significant increases in the confidence of health workers to talk to their clients about the health effects of smoking, raise ‘quitting’ with clients making health visits for unrelated reasons, assess clients’ stage of change for smoking cessation/readiness to quit, and raise smoking as a point of discussion with clients. In addition, there were increases in the number of health workers who provided advice about nicotine replacement therapy, secondhand tobacco smoke, and cutting down tobacco use. More Aboriginal health workers recognised the importance of offering smoking cessation advice to their clients after the training, and perceived that it was easier to offer this advice after having received the training. The number of Aboriginal health workers living in smokefree homes increased during the project, as did the availability of culturally appropriate written resources to support clients to quit.\textsuperscript{102} Similarly, evaluations of the use of SmokeCheck in Queensland\textsuperscript{35,66,90} and New South Wales\textsuperscript{35} found that health workers were satisfied with the training, that it increased their confidence to deliver smoking cessation advice appropriately, and that it improved their clinical practice. However, one study found that six months after their training, most health workers failed to deliver the intervention as intended due to perceived challenges in working in remote Indigenous communities.\textsuperscript{35} Similarly, follow up interviews with health workers trained in SmokeCheck in remote North Queensland indicated that while they felt positive about the training, they did not use brief interventions in the manner in which they had been trained, reporting instead that they adapted and used only some of the components.\textsuperscript{65}

While SmokeCheck training may have benefits for practitioners who smoke, its effectiveness in improving smoking cessation rates for patients is not yet clear. One study of the South Australian SmokeCheck program that has followed up clients at three and six months appears to have encouraged quit attempts, but the numbers are too small to make definitive statements about the success of this program.\textsuperscript{104} In a study evaluating the impact of a SmokeCheck pilot program in Queensland, there was no evidence that any patients or practitioners had given up smoking after six months.\textsuperscript{35} The remote North Queensland research mentioned above implemented SmokeCheck (albeit inconsistently) as part of a comprehensive tobacco control program, which overall resulted in a decline in consumption among Indigenous communities.\textsuperscript{65}

Quit Victoria has also been involved in developing and delivering educator training to Indigenous communities in Victoria and the Northern Territory. This two-day training program provides general information and brief intervention training, and notably presents this in an interactive way to promote
participants to think about and problem solve the challenging situations in which they may find themselves.91 Quit South Australia is funded by the Commonwealth government as part of the Tackling Indigenous Smoking program to provide a number of different smoking cessation training courses (QuitSkills and Motivational Interviewing) to health workers who work with Aboriginal peoples and Torres Strait Islanders.105 While these programs may be successful in improving health worker confidence to talk to clients about smoking cessation, the impacts on actual smoking rates, as with the SmokeCheck program, are not known.

8.10.7 Pharmacological assistance: nicotine replacement therapies, bupropion (Zyban) and varenicline (Champix)

There is evidence in other populations that nicotine replacement therapies (NRT), bupropion (Zyban) and varenicline (Champix) are effective at increasing the likelihood of cessation success (see Chapter 7).106–108 A review of studies in the US found that nicotine patches or bupropion were effective at helping African American smokers to quit,109 and a study involving Maori smokers found that bupropion was an effective treatment for smoking cessation.110

Only a small number of studies have examined the effectiveness of nicotine replacement therapies and/or bupropion among Indigenous Australians, and have found success rates between 6–19%—in New South Wales (two studies),111 Queensland (one study),112 Northern Territory (one study) and Victoria (one study).113 The sample sizes of most of these studies have been small, and none has been in a randomised controlled trial. All have combined nicotine replacement therapy and/or bupropion with brief intervention and/or some kind of ongoing counselling or support. Although the quit rates are lower than those reported for other populations in the medical literature,106 these studies provide evidence that assisted availability of nicotine replacement therapy, in combination with appropriate cessation support counselling, could benefit some Indigenous smokers. Several studies challenge the common perception that Indigenous people tend to be heavy smokers, and suggest that nicotine replacement therapy prescription should not assume that Indigenous smokers are necessarily heavily addicted. These studies have found low levels of nicotine addiction in some communities or sub-populations (measured by daily consumption based on store sales,114–115 or on the Fagerström Test for Nicotine Dependence116–117) for whom nicotine replacement therapy prescription would not necessarily be appropriate.

Several studies have also surveyed Indigenous Australians regarding their attitudes to and beliefs about pharmacological cessation assistance. In 2001, the National Aboriginal and Torres Strait Islander Tobacco Control Project spoke to 275 Aboriginal people and Torres Strait Islanders around the country and reported a high awareness of the existence of pharmacological aids to quitting smoking, and particularly of nicotine replacement therapy. However, a lack of factual information had led to a wide range of misconceptions and misunderstandings about the nature of these products and how they worked.118 Similarly, a study in six remote Northern Territory communities involving 25 community members and 19 health staff reported that knowledge about how nicotine replacement therapy works was low.12 Among the obstacles to access cited in these studies are: limited availability in some communities—nicotine replacement therapy is not routinely stocked, and there is a long delay between ordering and delivery of these medications;12 health staff report a lack of knowledge and confidence in prescribing;119 poor patient compliance—patients would not return for new supplies, or would run out after sharing their nicotine replacement therapy with other family members;12,18 and cost.12,18

Research in 2012–13 explored past and intended use of NRT, varenicline, and bupropion. Nicotine patches were most commonly used among a national sample of Indigenous Australians, followed by varenicline and nicotine gum. Despite similar proportions believing that they can help smokers quit, compared with non-Indigenous daily smokers, fewer Aboriginal and Torres Strait Islander daily smokers had ever used any NRT or medications (37% v 58.5%), or used them in the past year (23% v 42.1%), and these proportions were lower again for socioeconomically disadvantaged Indigenous smokers.118 Activities that are likely to improve the success of nicotine replacement therapy in helping Indigenous smokers to quit are: providing better information to patients and the community;12,18 providing nicotine replacement therapy as part of a comprehensive tobacco cessation program;18 providing ongoing support and counselling to patients through regular face-to-face meetings;12 and providing nicotine replacement therapy free of charge to Indigenous smokers wanting to quit.12,18,86

Since December 2008, nicotine patches have been available to Aboriginal and Torres Strait Islander patients at a subsidised cost on an authority script through the Pharmaceutical Benefits Scheme (PBS).119 However, since July 2010 nicotine patches and other pharmacotherapies have become available to Aboriginal and Torres Strait Islander patients on an authority script for no cost to healthcare cardholders and at the concessional rate for others. This is available as part of the PBS co-payment measure of the Practice Incentives Program Indigenous Health Incentive to services that are accredited against the Royal Australian College of General Practitioners (RACGP) standards.76 Among those surveyed in 2012–13, the majority of Indigenous people had obtained their last NRT free of cost.118 However, some Indigenous people will likely still face barriers to accessing health services that will hinder their ability to obtain NRT and other pharmacotherapies (such as cultural safety, language and racism—see Section 8.10.4) will remain. Other issues with the implementation of this incentive have also been raised, including the relatively lower rates of accreditation of Aboriginal community controlled health organisations;120 in 2010–11, while 71% of Aboriginal and Torres Strait Islander primary health-care services were accredited, 26% of these services had not achieved accreditation by the RACGP,121 meaning they were ineligible for the incentive.

8.10.8 Quitlines

Quitlines, when used as a component of anti-smoking campaigns, are cost effective and increase quit rates, particularly when multiple calls are made.122 There is international evidence that quitlines can be acceptable to and effective for Indigenous peoples.123–126 An evaluation of Aboriginal and Torres Strait Islander utilisation of the South Australian Quiltline found that similar proportions of Indigenous and non-Indigenous smokers registered for the service, and demographic variables and smoking addiction were also similar. However, Indigenous callers received significantly fewer callbacks and were significantly less likely to set a quit date. Three months later, they were significantly less likely to have successfully quit. The authors conclude that Indigenous Australians appear to be less engaged with the line, and suggest that tailoring the service might improve engagement.127 Other studies have shown that quitline services may be enhanced for Indigenous people through cultural awareness and competency training of staff,123 the availability of Indigenous quitline counsellors,124 the provision of nicotine replacement therapy in conjunction with telephone counselling,123,124 and when broader anti-smoking campaigns are targeted to culturally specific groups.126 One study in an Aboriginal health service in Victoria noted that, with encouragement, apprehension to receive support through quitlines was overcome, and that the quitline was well liked and potentially useful.112 However, quitlines are likely to be inappropriate and inaccessible for Indigenous people who live in remote or very remote areas, due to language barriers and access to the use of a phone. Improving access to and appropriateness of quitlines is one of the activities of the Tackling
8.10.9 Quit support groups and rehabilitation-style programs

While individually based interventions may work best for some, research also highlights the possible advantages of establishing support groups for those who want to quit smoking, particularly older smokers who find it difficult to resist the smoking behaviour of their peer group. These groups, preferably led by an Indigenous ex-smoker and perhaps open only to Indigenous people, would build upon sense of community and be likely to increase the success of quit attempts.\(^{27,28}\) The concept of rehabilitation-style programs, like those offered for alcohol and other drug withdrawal, has also been raised as a possibility.\(^{18}\)

There has been limited evaluation of quit support group programs for Aboriginal peoples and Torres Strait Islanders, though a small number of studies point to the potential of quit groups delivered as part of a more comprehensive approach and when modified to meet the needs of Aboriginal and Torres Strait Islander communities. A short course delivered in group sessions over a three-week period by an Aboriginal medical service in a rural community in Victoria achieved a 19% quit rate (6 of 32 participants). However the course was part of a multi-component community intervention that included brief cessation advice, nicotine replacement therapy, ongoing support from Quitline and the quit facilitator and an individually tailored management plan that involved a range of health professionals.\(^{12}\) Similarly, the ‘No More Boondah’ program in the ACT includes group support sessions as part of comprehensive smoking cessation supports. An unpublished evaluation shows that it has been successful at engaging community members, and supporting them to quit. Of the program participants, 29.8% ceased smoking and a further 23.9% reduced their smoking, an effect that remained at two and six months follow up.\(^{129}\)

An evaluation in NSW of ‘Give up the Smokes’—a culturally-appropriate group smoking cessation program for Indigenous Australians—reported a 30% quit rate after three months, which is comparable to cessation outcomes in non-Indigenous populations.\(^{130}\) A study in remote North Queensland offered assistance to local councils to implement the ‘Smoke Rings’ group support program for Indigenous smokers; however, only one of five councils adopted the program. This study highlighted significant problems with program implementation in remote communities, with no local health workers available to assist with delivering the program, one in five participants being a non-smoker, and poor and decreasing engagement. Smoke Rings formed part of a comprehensive suite of interventions, which together led to a reduction in smoking.\(^{65}\)

Health and welfare staff (n=19) working in remote Northern Territory communities reported that programs that are unmodified from the mainstream content and delivery mode are inappropriate for this setting. The course and materials should not only be translated appropriately, but the concepts in the program need to be 'translated' into an Indigenous worldview. In one community, staff had adjusted the group program to be delivered informally to family groups within their homes, rather than to mixed groups at a central location.\(^{12}\)

8.10.10 Role of remote community shops

As part of the 1999–2000 evaluation of a Northern Territory tobacco action project, researchers assessed the potential role of remote community stores to be involved in health promotion programs around tobacco action. Findings from the study suggest that community shops serving remote communities may potentially assist in tobacco control by supporting community tobacco action programs, through displaying or providing anti-tobacco health promotion materials, implementing smokefree policies, and providing staff with training to deliver cessation advice. Pricing policies adopted by community stores may also affect tobacco sales, although this is an area requiring further research.\(^{131}\) One study examined the effects of ‘income management’ on sales of tobacco in 10 remote Indigenous communities in the 18 months before and after the introduction of the Northern Territory Emergency Response. Income management strategies restrict the purchase of certain products, including cigarettes and tobacco, on 50 per cent of welfare recipients benefits aiming to encourage the sale of healthy food. The Income Management evaluation found no beneficial effect in terms of sustained change in the sales of healthy food, soft drink or tobacco resulting from the strategy. It did, however, find that there was a marked increase in all store sales with the government stimulus package. These findings suggest that income management alone will not lead to modification of spending patterns.\(^{132}\)

8.10.11 Social marketing

Mainstream social marketing campaigns, when well-funded and sustained over time, have been effective at reducing smoking prevalence.\(^{133}\) However, there are limited studies on the impact of mainstream media campaigns on Aboriginal peoples and Torres Strait Islanders. Evaluations of the National Tobacco Campaign found that recall of these advertisements was high, but that there was little effect on quitting attempts or on smoking cessation rates.\(^{27,134}\) A 2008 evaluation of the impact of the Bubblewrap campaign\(^{4}\) on 198 Indigenous smokers in Western Australia also found high rates of recall. In addition, the advertisements were judged to be believable and relevant by the majority of participants, and most had thought about cutting down the amount they smoked (81%) and/or quitting (68%) as a result of seeing these advertisements.\(^{135}\)

A qualitative study involving interviews with 25 community members and 19 health service staff in remote Northern Territory communities reported good recall of mainstream anti-tobacco media messages, especially those using graphic imagery.\(^{12}\) These findings have been replicated in a study involving 143 Indigenous and 156 non-Indigenous people who were asked to rate mainstream anti-tobacco advertisements on a scale that included message acceptance and personalised effectiveness. Indigenous people rated the mainstream advertisements higher than non-Indigenous people, and found advertisements with strong graphic imagery depicting emotive first-person narratives about the health effects of smoking particularly motivating. These findings suggest that Aboriginal and Torres Strait Islander smokers may be positively influenced by mainstream anti-smoking mass media campaigns, and that this could be a cost-effective way of impacting on smoking rates.\(^{29}\)

There have, over the years, been a number of examples of Indigenous-specific tobacco-related social marketing campaigns or projects. These generally take the form of an Indigenous component of a mainstream campaign or program (for example, posters or advertisements adapted with Indigenous slogans or Indigenous people on them),\(^{136–139}\) or form a component of a multi-faceted tobacco control program.\(^{57,140–142}\) Several documents have suggested general principles on which Indigenous-specific social marketing strategies could be based.\(^{27,28,86,95}\) These have been summarised in the document Developmental Research to inform the National Action to Reduce Smoking Rates Social Marketing Campaign.\(^{28}\) This research project involved conducting interviews and focus group discussions with more than 220 Indigenous people and 30 Aboriginal and non-Aboriginal health professionals from communities across Australia.\(^{28}\) It concluded that communications strategies in Indigenous anti-tobacco social marketing should
place a strong focus on the benefits for family and kin of quitting, including emphasising the impact of the financial cost of smoking on the family, and the adverse effects of smoking on health and fitness on the individual smoker and their family. Delivery of these messages should use Indigenous faces, voices and imagery and frame the messages in a positive and inspirational way. In addition, messages should be delivered using clear, jargon-free and regionally appropriate language, utilise local Indigenous people, use a narrative approach, and feature true stories and real people. Messages that are framed in terms of immediacy of impact (rather than a future focus) are likely to have a greater impact.28

Although there is limited research, a number of systematic reviews evaluating interventions for smoking cessation in international Indigenous populations have provided support for the use of culturally targeted messages.15,16 Several studies have documented the concerns of Indigenous people about the acceptability and efficacy of mainstream media campaigns, and discuss the need to improve the cultural and social relevance of advertisements for Indigenous people.12,27,28,86 One project in metropolitan and rural communities in Victoria documented that while older Indigenous people and Indigenous health workers believed that printed materials needed to be Indigenous specific or contain Indigenous content, many young people in the study did not necessarily agree; they reported being more likely to identify with the broader youth culture than with Indigenous culture, and commented that it made no difference to them if they were given Indigenous-specific materials.27

Revival, nurturing and continuation of Indigenous cultural heritage are strong motivating factors for some individuals and communities, and have been put forward as suitable approaches in Indigenous social marketing campaigns. In New Zealand, an anti-smoking campaign for Māori used the slogan ‘it’s about wh?nau’ (‘it’s about extended family’) and depicted testimonials from Māori smokers and wh?nau of ex-smokers; the focus was on immediate social consequences of smoking rather than future health consequences. The campaign was successfully recalled by smokers and their wh?nau one year after its launch, the advertisements were consistently rated as very believable or very relevant by over half of the smokers who had seen them, calls to the Quitline increased, and 54% of the smokers stated that the campaign had made them more likely to quit.126

Highlighting the connection between not smoking, good health and survival may therefore be a salient message for some Aboriginal and Torres Strait Islander smokers.86 Although, as discussed elsewhere in this chapter, while Indigenous culture and tobacco use have long been connected, the smoking of manufactured cigarettes is an introduced activity. One project has reported that younger smokers in particular showed an interest in this message: ‘it’s not part of our culture—give it back’.86

Several Indigenous community organisations in Australia have used connection to family, community and culture and the threat of smoking to these as a theme in their social marketing. Social marketing campaigns in South Australia (‘Give up smoking for good’143 and ‘Stickin’ it Up the Smokes’144) and the ACT (‘Beyond Today’145) use images of well-known community members (although not necessarily high profile or famous) along with slogans that promote the benefits of quitting for family, community and culture. Another organisation, the Kimberley Aboriginal Medical Services Council, developed posters using the slogans: ‘Stop the Smoke! You and country are one. You poison yourself. You poison your country too’; ‘Look, listen and learn. Tobacco smoking kills’; and ‘Traditional smoking heals. Tobacco smoking kills’.142

A recent national social marketing campaign, Break the Chain.146 aimed to reduce smoking prevalence among Indigenous people, along with other disadvantaged and hard to reach groups. The campaign included TV, radio, print, and digital advertising. An evaluation of the campaign found that it achieved a high level of overall reach, with almost all Indigenous respondents exposed to at least one element of the campaign. Almost two thirds of the overall target audience had taken action as a result of exposure. Among those exposed, one third reported cutting back on the amount smoked, one quarter had discussed smoking and health with family and friends, and more than one in ten indicated they had quit smoking. Similar proportions of respondents reported intending to take action in the future as those who had taken action. These results support the receptiveness of Indigenous Australians to social marketing campaigns, and represent an ongoing opportunity for promoting behaviour change.147 In May 2016, the Commonwealth government launched a new advertising campaign targeting Indigenous smokers. The campaign, Don’t Make Smokes Your Story, encourages Aboriginal and Torres Strait Islander people to quit both for their own health, and for the health and wellbeing of their families.148

Practitioners and researchers in Indigenous tobacco action are clear that social marketing is an important component of a comprehensive tobacco action program, and that a social marketing approach should use a combination of mainstream and Indigenous-specific content and messages, at both national and regional/local levels.28 Data from the Talking about the Smokes project showed that most Indigenous smokers remembered recently seeing an anti-tobacco television advertisement, while just under half recalled targeted (featuring an Indigenous person or artwork) advertising and about one in six remembered seeing local, targeted advertising. Frequent recall of warning labels, news stories, and advertising was associated with concerns about health and wanting to quit, and this relationship was stronger for local and targeted advertising. These results support the use of both mainstream and targeted campaigns in encouraging quitting-related thoughts and behaviours among Indigenous Australians.30

### 8.10.11 Social media and mobile phones

The Internet and mobile phones offer enormous potential for the delivery of low cost and high reach cessation interventions, and a growing body of research supports their effectiveness in increasing quit rates.149,150,151 (see Section 7.14). The potential for using digital technologies in the production and distribution of tobacco cessation and prevention messages in Indigenous communities is significant; videos and messages can be produced relatively inexpensively and distributed quickly and widely via social media websites and through mobile phone technology. The use and uptake of digital technologies by Indigenous youth is increasing rapidly, including in remote communities, although many communities still experience issues with access to communication technologies and services.152 Mobile phone messaging to disseminate smoking cessation messages and support appears to be acceptable to Māori people, including young people.153-154 A study involving Māori and non-Māori found that using mobile phones to communicate smoking cessation messages resulted in an increase in short-term self-reported quit rates, and was equally successful with Māori as with non-Māori.154

A 2014 review found that despite the considerable potential of social media and mobile phone interventions, current evidence for their effectiveness or health benefit among Indigenous peoples is sparse and mixed. The most robust evidence is in international studies exploring text messaging for smoking cessation, but a more comprehensive understanding of their role in quitting among Indigenous Australians is needed.155 The authors summarise the apps and social media programs with a focus on Indigenous Australians as follows:

<table>
<thead>
<tr>
<th>Apps and social media programs with a focus on Indigenous Australians (as at December 2014)</th>
<th>Name of app or campaign</th>
<th>Organisation</th>
<th>Description</th>
<th>Evaluation or evidence of reach / impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: Brusse C, Gardner K, McAullay D, and Dowden M.155</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.10.12 Secondhand smoke

High smoking rates make exposure to secondhand smoke a health issue for many Aboriginal peoples and Torres Strait Islanders, particularly infants and children (see Section 8.7.4). Although there have been notable increases in the number of Indigenous smokefree homes over time,156 in 2014–15, about 13% of Indigenous children lived with someone who smoked inside the home.157 Secondhand smoke has been documented as an issue of concern to Indigenous smokers, particularly in relation to its effect on children.69 Several studies have described how smokers have implemented smokefree practices to protect the health of children and/or to support their own quitting attempts.12,158 The impact of secondhand smoke on the health of children and family has been documented as a motivator for smoking behaviour change, whether quitting, reducing the number of cigarettes smoked or smoking away from non-smokers.14,26,63,65 However, a 2015 study found that despite reporting smoke-free homes/cars, Indigenous mothers and their partners continued to smoke in the first year of their baby's lives, exposing them to secondhand smoke. An intervention involving home visits was not helpful in reducing the incidence of respiratory illness in the infants.159 Several other initiatives have been developed specifically for Indigenous communities around secondhand smoke, but these have not been evaluated.57,139 Findings from Arnhem Land in the Northern Territory suggested greater local ownership of smokefree policies and grassroots development of strategies that incorporate cultural contexts can help create more effective management of secondhand smoke.160

Smokefree workplaces have been found in mainstream studies to reduce exposure to secondhand smoke and to reduce cigarette consumption, increase the rate of quit attempts, and reduce the rates of relapse in smokers who are attempting to quit.151,162 Smokefree policies in Indigenous health services can support other tobacco action activities by contributing to the denormalisation of tobacco use within Indigenous communities, supporting Aboriginal health workers and patients who smoke to quit, and reducing exposure to secondhand smoke. Many Aboriginal community controlled health organisations around the country have developed and implemented smokefree workplace policies. Further, research in remote North Queensland found that although many businesses lacked formal smokefree policies, many had smokefree areas or informal policies in place. Community knowledge of smokefree areas was high, suggesting that informal policies are effective among Indigenous communities.65

There has been no evaluation specifically of the impact of these smokefree policies on quit rates (as they are generally one of several components of comprehensive tobacco action programs), but several services have documented the processes of developing and implementing these policies.49,54,163 Anecdotally, the challenges in this area are largely around implementing the smokefree policies; Aboriginal health workers have reported difficulties in requesting compliance from community members, particularly when the community has not been engaged in the process.87

8.10.13 Specific sub-populations

8.10.13.1 Aboriginal health workers

A number of multi-component projects have been developed specifically to support Aboriginal health workers to quit smoking. These projects generally include a range of activities, such as providing free nicotine replacement therapy, support groups, intensive follow-up, support for families of Aboriginal health workers to quit alongside them, incentives for staff to quit, and smokefree workplace policies.54,163 Research in South Australia recommends an ecological approach to support smoking cessation among Aboriginal health workers, incorporating both individual level strategies and addressing social determinants of smoking.164

8.10.13.2 Youth and children

<table>
<thead>
<tr>
<th>Stickin' it up the smokes</th>
<th>Aboriginal Health Council of South Australia</th>
<th>Social marketing campaign with prominent Facebook page, targeting smoking cessation/abstinence for young Aboriginal women.</th>
<th>No evaluation. Facebook page has 1274 likes, 0-19 likes per post.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rewrite your story</td>
<td>Nunkuwarrin Yunti of South Australia Inc.</td>
<td>Web-based campaign focused on social media, launched January 2013. Includes sophisticated website with interactive “pledge” feature, Facebook page, and YouTube channel hosting personal “stories” about smoking and smoking cessation.</td>
<td>No evaluation. Main website includes 402 “pledges and stories”. Facebook page active 2011-present, currently has 443 likes. YouTube channel's 20 videos have between 8 and 1793 views.</td>
</tr>
<tr>
<td>NoSmokes.com.au</td>
<td>Menzies School of Health Research</td>
<td>Suite of online projects/experiments designed for use by Aboriginal and Torres Strait Islander people, including mobile software, videos, and online games. Hosted from dedicated website, Facebook page, and YouTube channel.</td>
<td>Only focus-group/process evaluation available. Facebook page active 2010 to present has 383 likes, YouTube channel's 33 videos have between 9 and 17,143 views.</td>
</tr>
<tr>
<td>Hip Hop Dance-Off</td>
<td>Menzies School of Health Research</td>
<td>Part of “No Smokes” suite of eHealth projects.</td>
<td>10 ratings on iTunes store, 1000-5000 installs on Google Play store.</td>
</tr>
<tr>
<td>No Smokes/So you think you can Quit?</td>
<td>Menzies School of Health Research</td>
<td>Part of “No Smokes” suite of eHealth projects. App available for iPhone, iPad, and Android.</td>
<td>9 ratings on iTunes store, 10-50 installs on Google Play store.</td>
</tr>
<tr>
<td>Quit for you, quit for two</td>
<td>Commonwealth Department of Health</td>
<td>Mobile app, part of government advertising campaign intended to encourage mothers from a “diverse background” to quit smoking. Includes tracker/educational component for baby progress and money saved, and an animated baby character will play games, assist with timing breathing, etc. Includes Quitline connection and other support options.</td>
<td>5000-10,000 installs on Google Play store with 21 ratings at 4.1/5, 6 ratings on iTunes store at 4.5/5.</td>
</tr>
</tbody>
</table>
Reviews of mainstream studies have found that there is limited evidence for the effectiveness of school-based programs for smoking prevention among youth when the programs are based on information giving or developing general social competence, but that co-ordinated, widespread, multi-component community interventions are effective. Mass media campaigns may also be effective for young people when well researched and appropriately developed and delivered.

Smoking prevention programs aimed at children are recognised as a priority area for action by many Indigenous people. Respondents to the National Aboriginal and Torres Strait Islander Tobacco Control Project Survey felt that schools-based programs must begin in the early primary years, and should be reinforced at every year level, at every opportunity. Appropriate and appealing resources using visual, interactive, and memorable elements (such as jingles and songs) were thought to be helpful. It was also considered important to provide adequate recreational facilities and organised activities to support children through the hours when they are not at school, when key factors contributing to uptake—such as peer group pressure, concerns for personal image, and boredom—may be at their height.

However, as suggested by the evidence from the mainstream context, school-based programs alone are clearly not sufficient to address smoking uptake by young people. Particularly in communities where school attendance is sporadic, other means of conveying messages to children need to be found. The importance of family influence on smoking behaviours highlights the potential of family- and community-based interventions, which target both adults and children to impact the rates of uptake among youth. Reducing the social acceptability of smoking in Indigenous communities, and reducing smoking among significant adults who are likely to influence young people to take up smoking, should arguably receive a greater emphasis in these programs. Indigenous participants in an evaluation of the National Tobacco Campaign felt that the emphasis of tobaccocontrol programs should be on older smokers, as they felt that smoking was highest in this group, that many were suffering from smoking-related illnesses, and that they would be most likely to influence other community members, including young people, to quit.

While there have been several tobacco action initiatives that target Indigenous young people, none have been evaluated for their impact on smoking uptake. Some of these programs have been school based, while others have been community based, or part of multi-component programs. As part of a comprehensive tobacco control program in remote areas of Queensland, 10 teachers across three schools (two primary and one secondary) were trained in the Smokin’ No Way program. At evaluation, none used it as intended (as a set of structured lesson plans), though seven teachers reported using some components with positive responses from students. No schools developed systems to continue use of the resource, and although it was occasionally used up to 10 months after the project, teachers thought it was unlikely that it would still be in use the following year. High turnover of teachers was suggested as a hurdle to continued use, and annual training was suggested to improve sustainability. An analysis of Victorian data from the Australian Secondary Students’ Alcohol and Drug Survey shows an association between intensive anti-tobacco campaigns and reduced prevalence of smoking among Indigenous (and non-Indigenous) school students.

### 8.10.13.3 Pregnant women

A review of mainstream studies found that smoking interventions during pregnancy result in reduced smoking during late pregnancy, and improved birthweight. The majority of published studies of smoking in Indigenous pregnant women are descriptive studies (see Sections 8.3.3, 8.6 and 8.7.4). There are several projects that have focused specifically on providing training and resources: the Indigenous Women’s Project through the Aethma Foundation Western Australia; the Smoke-free Pregnancy Project—Aboriginal Women and their Families through Quit South Australia; and the For Me & Bub SmokeCheck Pregnancy Project in Queensland.

The project was broadened to include the whole community because of the many influences that the family and community have on pregnant women. A literature review produced for this project suggested the integration of services for pregnant women into existing clinical practice, incorporating tobacco action activities into routine antenatal care practices. It also suggested a multi-component program, including tobacco action activities targeting the family and community such that a more supportive environment for quitting is created for the pregnant woman. The project was appropriated and delivered. A further component of programs with pregnant Indigenous women that is yet to be evaluated is the use of incentives. A systematic review and meta-analysis of research on the role of personal financial incentives in promoting healthy behaviours found that they increased smoking cessation, which was the only habitual health-related behaviour (compared with eating, alcohol consumption and physical activity) for which changes were maintained up to 18 months from intervention start and sustained after incentive removal. Several programs in other countries have shown success with using incentives to assist pregnant women to quit smoking. A review of smoking interventions with pregnant women found that the most successful intervention appeared to be the use of incentives. Another review has suggested that the use of incentives is likely to be improved by the value, the immediacy to the positive behaviour, the periodic (as opposed to one-off) delivery of the reward, rewarding support from the individual’s social network, and being part of a broader program that also builds skills and confidence. Research in a highly deprived area of England found that offering financial incentives that increased in value with duration of abstinence led to quit rates of 20% at delivery and 10% at 6 months postpartum. The use of incentives may be a successful approach in Aboriginal and Torres Strait Islander communities, although their use is not universally supported. A roundtable of researchers and health professionals, including Aboriginal and Torres Strait Islander health workers, were generally cautious about the use of incentives and were not enthusiastic about their use in smoking cessation programs for pregnant Indigenous women. However, a NSW study involving Aboriginal and Torres Strait Islander pregnant women and health workers found good support for the use of ‘rewards for women who stop smoking with vouchers to get things for the mother or baby’: 63% among the pregnant women who smoked; and 56% among the
workers. A program related to this study aimed to help pregnant Aboriginal women in rural New South Wales to quit smoking by delivering an incentives-based program offering rewards in gradually increasing amounts until six months postpartum. These rewards were offered within a comprehensive program that also included counselling, provision of specifically designed resources, free nicotine replacement therapy for the women and those in their households, quit support groups and household resources. Of the nineteen women completing the program, sixteen made a quit attempt, and eight remained confirmed non-smokers in late pregnancy. More generally, a 2013 systematic review of cessation support for pregnant Aboriginal and Torres Strait Islander women found that there was no evidence for any interventions that are effective. This hinders development and implementation of evidence-based policy and practice. A study exploring views of pregnant Aboriginal Australian women and their antenatal care providers on strategies to support smoking cessation found that smokers were less positive about the potential effectiveness of most strategies than the providers. For example, family support was considered helpful by about two thirds of smokers and almost all providers; proportions were similar regarding the helpfulness of advice and support from health professionals. Rewards for quitting were considered helpful by about three in five smokers and providers, with smokers rating them more highly and providers rating them lower, than most other strategies. Quitline was least popular for both. Research in 2015 found that although most pregnant Indigenous women reported receiving advice and support to quit, the persisting high prevalence of smoking suggests that this support is insufficient to overcome the many factors that promote smoking amongst this group. Increasing knowledge about antenatal smoking risks may motivate some women to try to quit; however, this alone is unlikely to address the many interacting factors that lead to and perpetuate smoking. Addressing the social environment and daily stressors, particularly those exacerbated by pregnancy, may be critical to supporting quit attempts.

8.10.13.4 Prisoners

Traditionally, there have been very high rates of smoking by Indigenous prisoners (see Section 8.3.5) along with significant challenges to providing tobacco control activities within prisons. Tobacco is a commodity that plays an important social role within prisons, and there is considerable debate over the practical and moral issues around the management of smoking within prisons, including making prisons, or even parts of prisons, smokefree. Nonetheless, all Australian states and territories except Western Australian have introduced or are planning to introduce complete smoking bans in prisons.

In the absence of total bans, smoking cessation programs should take into account the unique stresses of the prison environment. Programs should also be ongoing to accommodate the constantly changing prison population, and the changes in the readiness to quit of individual prisoners. Smoking cessation programs have been implemented within some prisons, with some specifically targeting Indigenous prisoners, but there has been little evaluation of these programs for their impact on smoking cessation. One study that evaluated a program in a New South Wales prison prior to the state-wide ban—where participants (n=30, with 50% Aboriginal) were offered a combination of bupropion, nicotine replacement therapy, brief cognitive behavioural therapy and self-help resources—found a quit rate of 26% at six months, with the rest of the participants reporting that they smoked less than one cigarette per week.

8.10.14 Broader legislation

State/territory and Commonwealth legislation that controls advertising and packaging, taxation and pricing, smokefree public places, and sales has been found to be successful in the general Australian community in reducing consumption and/or access to tobacco products (see Chapter 13). However, research evaluating the impact of such legislation on smoking rates among Indigenous people is sparse. Increasing taxes on tobacco has been shown to reduce consumption in the general Australian community, and has been shown to result in a greater decline in consumption among low-income groups than among middle- and high-income groups. The National Aboriginal and Torres Strait Islander Tobacco Control Project raised some concerns about price increases causing financial stress that could in turn lead to greater levels of smoking. In a 2007 qualitative study involving community members (25) and health staff (19) in remote Northern Territory communities, perceptions of the impact of price increases were conflicting. While participants suggested that higher prices were not a disincentive to smoking, they also talked about changing their smoking behaviour and accessing a smaller number of cigarettes when money was scarce. In this same study, participants described the difficulties in remote communities of enforcing existing legislation around smokefree public places, and that the lack of other Northern Territory legislation was undermining their tobacco control efforts. Participants also reported good recall about the picture health warnings on tobacco products, but some reported disregarding these and employing strategies to avoid seeing the images. Research on the effects of the 25% tobacco tax excise rise in 2010 on remote Indigenous communities found that there was strong overall support among Indigenous Australians for price increases as a means of reducing smoking. Participants also suggested that tax increases needed to be supported by other tobacco control activities and greater local cessation support. While findings regarding effects of the tax on consumption were inconclusive, participants did report adopting price minimising strategies, such as increased demand to share cigarettes.

There is also some research showing that plain packaging legislation appears to have similar effects on reducing pack appeal and reducing misperceptions about the relative harmfulness of cigarettes among Aboriginal and Torres Strait Islander people as the general population. One study found that, among Indigenous Australians, plain packaging had reduced misperceptions that some brands are healthier than others. Compared with pre-plain packaging, younger participants were also less likely to view some brands as more prestigious than others.

References


125. Hayward LM, Campbell HS, and Sutherland-Brown C. Aboriginal users of Canadian quitlines: An exploratory analysis. Tobacco Control, 2007; 16(suppl. 1):60–4. Available from: http://tobaccocontrol.bmj.com/cgi/content/abstract/16/Suppl_1/i60


