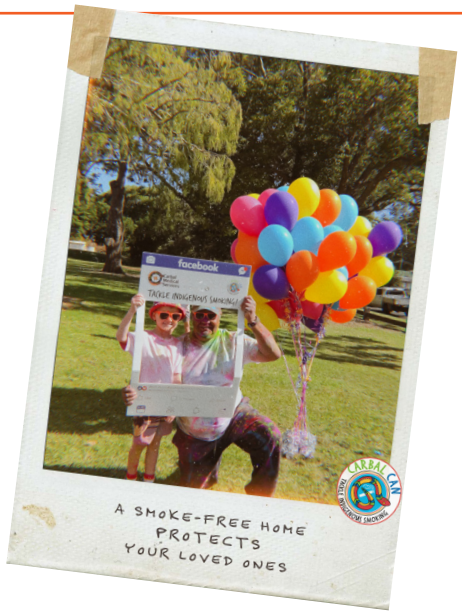
Carbal Institute of Aboriginal and Torres Strait Islander Health Research

The Origins and Current Status of Nicotine Addiction Within the Australian Indigenous Community

[The writer briefly discusses the history of the introduction of smoking and its health impacts within the Australian Indigenous Community followed by an examination of initiatives implemented to reduce smoking levels thereby resulting in some socio-economic benefits]



The 'Menzies School of Health Research' reminds us that 'Aboriginal and Torres Strait Islander people were introduced to smoking cigarettes only in the last 200 years'[1] and that, currently, 'many people still smoke. In fact, twice as many Aboriginal and Torres Strait Islanders smoke tobacco as non-Aboriginal Australians.'[2] The Menzies School further emphasises this predilection of the indigenous community to smoking, commenting that' %47 of Aboriginal and Torres Strait Islander people over the age of 15 years smoke daily'[3]. The following table identifies the impacts of smoking on the indigenous community both in terms of life expectancy and resulting diseases.

Impacts Of Smoking on The Indigenous Community

- Aboriginal and Torres Strait Islander men's life expectancy is 67 years compared to 79 years of non-Aboriginal Australian men
- The life expectancy for Aboriginal women is 73 years compared to 83 years for non-Aboriginal women
- Much of this difference is due to diseases related to smoking tobacco, such as heart disease, lung and throat disease, and cancers
- 20%of Aboriginal people die from sickness caused by smoking. That means, smoking kills one Aboriginal person in every five
- Most Aboriginal and Torres Strait Islander houses are smoking houses. In fact, 62% of these houses have at least one regular smoker
- More Aboriginal women smoke while pregnant compared with non-Aboriginal women
- Smoking is responsible for more Aboriginal health problems and deaths than alcohol and other drugs combined
- Aboriginal and Torres Strait Islander people experience more sickness and die much younger than non-Aboriginal Australians. Smoking is one of the big reasons for this

1. Menzies School of Health Research'
2. Ibid
3. Ibid

BUT HOW DID THIS ADDICTION TO NICOTINE BEGIN?

According to Greenhalgh and others in an article published in 'Tobacco Australia' 'smoking first reached Australian shores when it was introduced to northern-dwelling Indigenous communities by visiting Indonesian fishermen in the early 1700s.'[4] They further point out that 'British patterns of tobacco use were transported to Australia along with the new settlers in 1788. Among free settlers, officers and convicts, tobacco smoking was widespread and, in the years, following colonisation, British smoking behaviour was rapidly adopted by Indigenous people as well'[5] . Now, let's have a look at the incidence of tobacco consumption in remote indigenous communities. In December 2008 'Social Science and Medicine' conducted research in the remote indigenous communities in the Northern Territory and concluded that 'there is a complex interplay of historical, social, cultural, psychological and physiological factors which influence the smoking behaviours of Indigenous adults in these communities.'[6] Waterworth and others explored the factors influencing the health behaviour of indigenous Australians by focusing their research on the perspectives from support workers. Once the results were compiled the researchers identified the themes below and cross-referenced them to key social factors.[7]

Identified Themes	Key Social Factors
▪ Culture, Social Networks, History, Racism, Socioeconomic Disad-vantage, And the Psychological Distress	Broader Social Factors
▪ The Desire to Retain Cultural Identity and Distinctiveness May Have Both Positive and Negative Influence On Health Risk Behaviour	Personal Factors
▪ Strong Social Connections to Family and Kin That Is Intensified by Cultural Obligations, Appears to Affirm and Disrupt Positive Health Behaviou	Intimate Social Connections
▪ The Separation Between Indigenous and Non-Indigenous Social Con-nection/Networks That Appeared to Be Fostered by Marginalisation and Racism May Influence the Effect of Social Networks on Health Behaviour	Broader Social Factors
▪ Communication Between Indigenous and Non-Indigenous People May Be Interrupted by Distrust Between the Groups, Which Reduces the Influence of Some Non-Indigenous Sources on The Health Behav-iour of Indigenous People	Broader Social Factors

But what are the connections between such key social factors and their related themes?

Good question. The 'Menzies School of Health Research' suggests that there are six points underpinning the continuing tendency for the Australian indigenous community to use tobacco products. The first point made is that 'many aboriginal people say 'smoking is part of our culture', followed by the belief that 'smoking is a part of normal everyday life'.[8] The school also points out that 'People who don't use tobacco may end up feeling alone and separated from their family and community.' [9]

4. Tobacco in Australia Greenhalgh, EM, Scollo, MM and Winstanley, MH. Tobacco in Australia: Facts and issues. Melbourne: Cancer Council Victoria; 2020
5. Ibid
6. Social Science and medicine Volume 67, Issue 11, December 2008, Pages 1708-1716
7. Factors Influencing the Health Behaviour of Indigenous Australians: Perspectives from Support People Pippa Waterworth, Published: November 24,
8. Menzies Op Cit
9. Ibid

Once again, the common theme of colonial impact is also identified, before reminding us that there is an obvious connection between lower socio-economic status and higher rates of tobacco use; inevitably leading to higher incidences of disease and death. Lastly, the sixth point is postulated as follows: 'People use a lot of tobacco where there is pain and suffering and the tobacco use keeps the cycle of pain and suffering going.'[10] With special reference to the link between socio-economic status and tobacco usage, especially among the rural and remote indigenous communities, Carroll and others published a paper in the BMJ in June 2019, which concluded that 'Smoking rates are associated with greater community-level socioeconomic status and size.'[11] Greenhalgh and others examined the trends in the prevalence of smoking by socio-economic status in February of 2021. **Their conclusions are well presented in the following Table.**

(per cent) 2016 ,years and older, by SES characteristics 14 Tobacco smoking status, people aged

	*NEVER SMOKED er smoked	EX-SMOKERS	CURRENT SMOKERS
Occupation			
Volunteer or charity work	58.8	30.0	11.2
Unemployed	62.6	13.4	24.1
Unable to work	40.5	27.0	32.5
Student	90.7	4.6	4.7
Socioeconomic status			
Single with dependent children	44.6	25.6	29.9
Retired or on a pension	54.6	36.2	9.2
Remote/Very remote	51.6	25.3	23.0
Outer regional	57.5	23.9	18.6
Major cities	65.7	21.7	12.6
Labour force status			
Currently employed	62.3	23.0	14.7
Couple with dependent children	64.0	23.7	12.2
Education Level			
12 Completed year	60.0	21.6	18.5
Certificate II or IV	48.1	28.2	23.8
Bachelor degree	72.5	19.6	7.9
Demographic Cohorts			
years +14 ,All persons	63.1	22.8	14.0
26-25 All persons aged	59.1	23.8	17.1

From 2019, socioeconomic quintiles were calculated using the 2016 Census of Population and Housing.

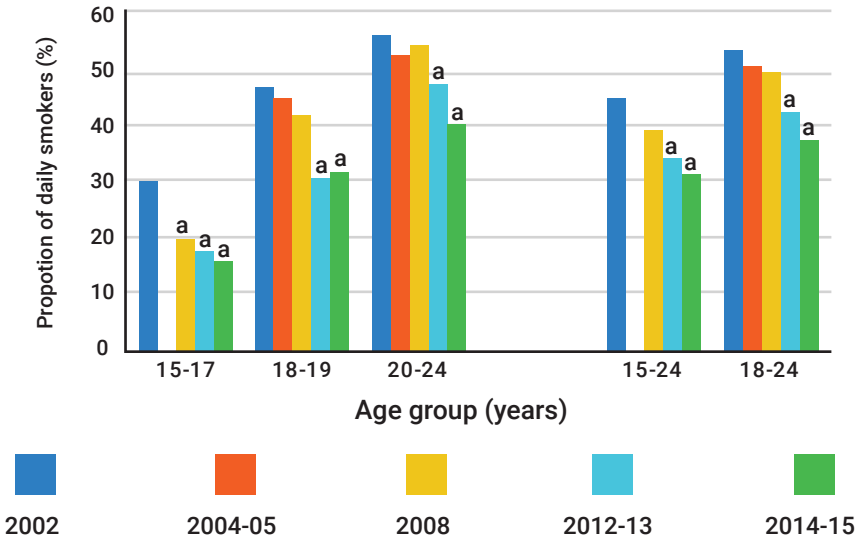
10. Ibid
11. Climatic and community sociodemographic factors associated with remote Indigenous Australian smoking rates: an ecological study of health audit data
Suzanne Jane Carroll, Michael J Dale, Ross Bailie, Mark Daniel

In terms of the relationship between 'OCCUPATION' and 'SMOKING' it is immediately apparent that those who are 'unemployed' or 'unable to work' have higher per centage smokers, %24 and %32 respectively. It is fairly obvious that there is a relationship between the stress levels associated with being unemployed or unable to work and this is clearly reflected in the high percentages of smokers. Similarly, when looking at the percentages in the socioeconomic area, a nearly %30 score for single persons with dependent children is not unsurprising both in terms of constant care-giving and continuing financial issues. It might even be suggested that living in remote areas explains the higher percentage of %23 compared to %12 in the major cities. However, it must be conceded that such a suggestion is, in the absence of corroborating data, purely speculative. It would seem that the education level of the population does link to the predilection to smoking or otherwise. In the Table above the percentages scores of %18 and nearly %24 for secondary and post-secondary certificate graduates' respectively compare to a lower percentage of smokers with undergraduates scoring at a much-reduced rate of %7.9. It is also interesting to note that although there are %14 of smokers in the early teens group there is a relatively small increase to %17 in the early adulthood cohort. Once again, speculatively, it is suggested that there would be a correlation between the extra responsibilities of this particular cohort in terms of employment, relationships', children, and possibly education and/or training commitments.

But let us now focus on what is happening to Australian indigenous youth, especially in terms of the 'drivers' contributing to both the take-up and continuation of smoking and its resultant addiction. Heris and others from Charles Darwin University examined the changes in the age young Aboriginal and Torres Strait Islanders start smoking between 2002 and 2015. They point out that 'most regular smoking begins during adolescence and young adulthood, defined …. as 10-24 years ' [12]. However they concede that there are, in fact, three sub-sets comprising this age group: firstly, what they term 'early adolescence', which is between 10-14 ; and, secondly, a group designated as 'young adulthood' , this being between the ages of 20-24. The disturbing statistic relating to this research is the research outcome confirming that 'almost all (%99) [are] daily smokers' [13] But, there was also good news! Heris's research revealed that between 2002 and 2014-15, ' daily smoking prevalence declined significantly among young people aged 15-24, from %45 down to %31, a reduction of %14 [14] The following graph clearly indicates a marked decrease across the 24-15 indigenous adolescents' and young adult groups, starting in 2002, proceeding through 2013-2004, until 2015 where the aforementioned 14% reduction was noted. As shown the bar graphs, uniformly, depict fairly steep reduction gradients across all for sub-groups: 15-17 ,18-19 ,20-24 ,15-24 and 18-24.

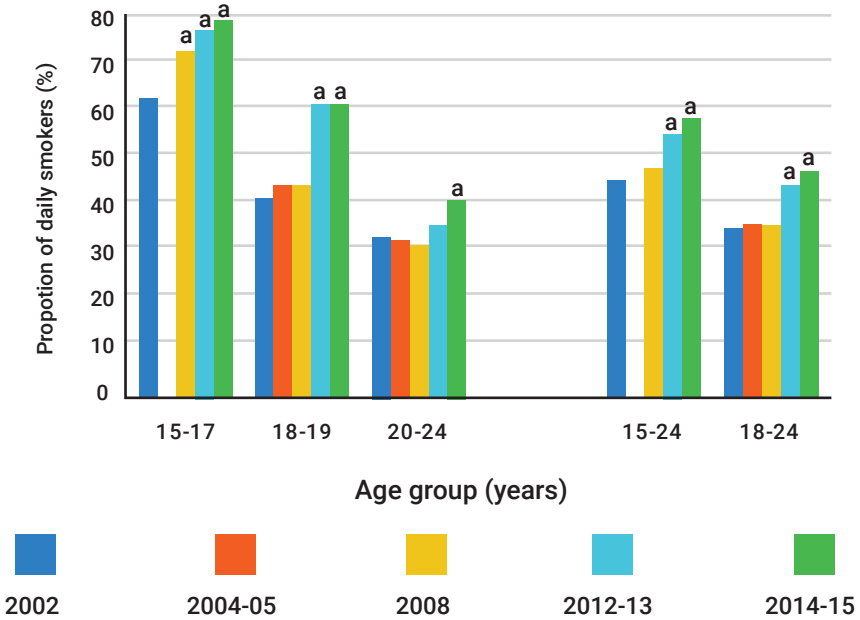
12. Changes in the age young Aboriginal and Torres Strait Islander people start smoking, 2015-2002Heris, Christina L.; Eades, Sandra J.; Lyons, Louise; Chamberlain, Catherine; Thomas, David Published: 2020/06/30
13. Ibid
14. Ibid

Figure 1:
Proportion indigenous adolescents and young adults aged 15-24 years who smoked daily, 2002 to 2014 -15.



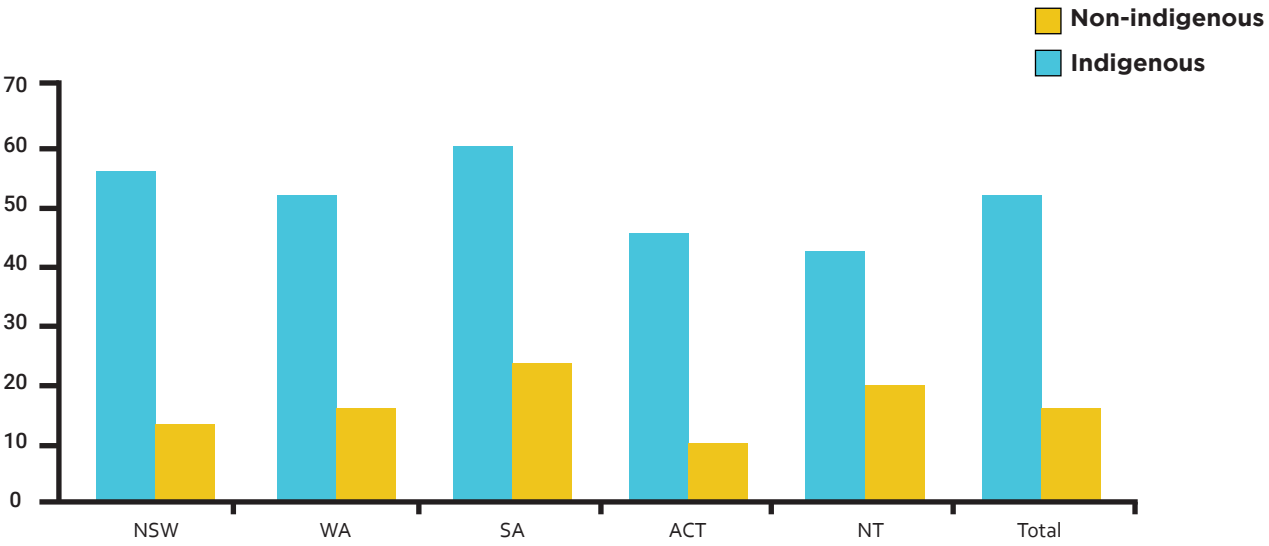
Conversely, the following graph reveals the proportion of indigenous adolescents and young adults, again between 15 and 24 years, who have never smoked, also between 2002 up until 2015.

Figure 2:
Proportion indigenous adolescents and young adults aged 15-24 years who have never smoked 2002 to 2014 -15.



It would certainly be remiss of us not to examine a group, which, like the young adult population, does present evidence of, not only nicotine addiction, but also alarming exposure of their smoking habits to their unborn and newly born children; this group, obviously, being 'pregnant' mothers. In 2006 the Australian Institute of Health and Welfare was commissioned by the National Advisory Group on Smoking and Pregnancy 'as part of an overall strategy to reduce smoking in pregnancy in Australia' It is interesting to note that, as shown in the graph below, the alarming discrepancy between non-indigenous and indigenous pregnant women as of 2003.

Figure 3.3:
Proportion of mothers smoking uring pregnancy, by Indigenous status and state and territory, 2003



Source: Table 3.4.

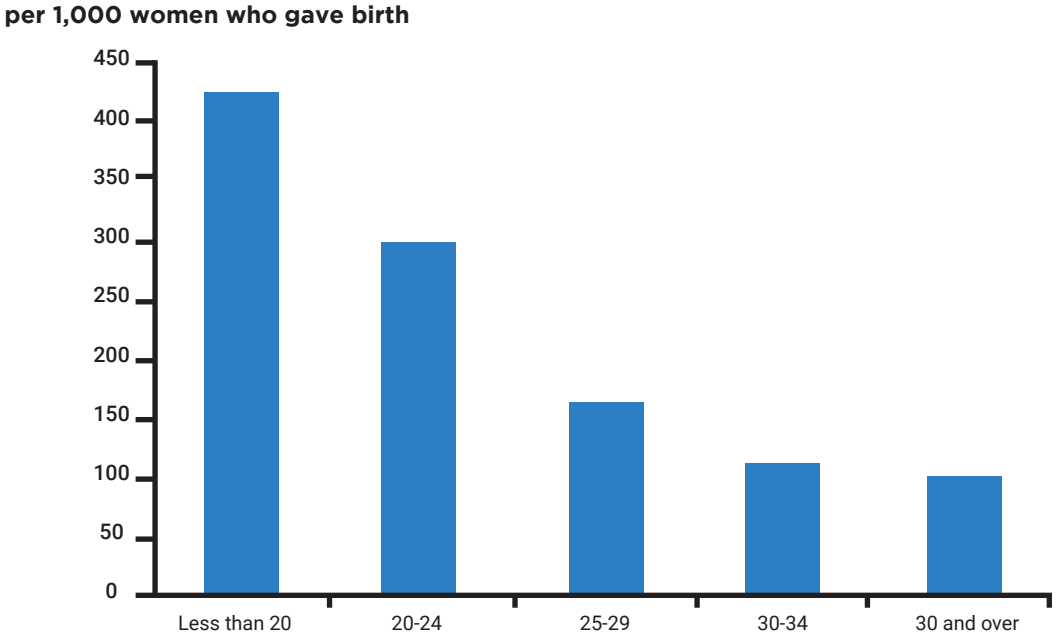
While the discrepancy is obviously concerning it is the actual numbers which are of cause for concern. As the overall total shows the non-indigenous smoking percentage among the women surveyed was just over %15 compared to the much higher percentage of nearly %55 for indigenous women-an alarming ratio of 11: 3 for non-indigenous to indigenous pregnant smokers. A further analysis regarding the related 'demographic profile' displays the smoking status during pregnancy, by maternal age, 2003

Table 3.3:
Mothers tobacco smoking status during pregnancy, by maternal age, 2003

Smoking status	Age group (years)							
	Less than 20	20-24	25-29	30-34	35-39	40 and Over	Not stated	total
	Number							
Smoked	2,665	6,088	6,468	5,446	2,292	465	1	23,405
Did not smoke	3,564	14,135	31,494	39,458	18,653	3,886	9	111,179
Not stated	96	128	151	164	94	14	__	647
Total	**6,325**	**20,331**	**38,113**	**45,068**	**21,039**	**4,345**	**10**	**135,231**
	Percent							
Smoked	42.1	29.8	17.0	12.1	10.9	10.7	10.0	17.3
Did not smoke	58.3	69.5	82.6	87.6	88.7	89.0	90.0	82.2
Not stated	1.5	0.8	0.4	0.4	0.4	0.3	__	0.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

The following figure shows age-specific rates of smoking during pregnancy for 2003. Smoking decreased progressively with age, from 421.3 per 1,000 mothers aged less than 20 years, to 108.6 per 1,000 mothers aged 35 years and older.

Figure 3.2:
Mothers reporting smoking during pregnancy, per 1,000 women who gave birth, by age group, 2003.



Source: Table A2.

Once again, as identified in previous papers published by this Institute, the geographical location of the pregnant women is a key factor with regard to rates of smoking. It is acknowledged that the higher percentage of indigenous smokers in 'remote' and 'very remote' areas has contributed significantly to the lower numbers in these areas who are classified as 'non-smokers'. The following table classifies 'smoking status' in terms of: Smoked; Did not smoke; Not stated; with a 95 % confidence rating.

Table 3.6: Mothers tobacco smoking status during pregnancy, by remoteness area, 2003.

Smoking status	Major cities	Inner regional	Outer regional	Remote	Very remote	Not stated	total
				Number			
Smoked	13,675	4,707	3,252	916	821	6	23,377
Did not smoke	84,012	15,454	8,283	2,188	1.150	15	111,102
Not stated	181	31	164	86	171	1	634
Total	**97,868**	**20,192**	**11,699**	**3,190**	**2,142**	**22**	**135,113**
				Percent			
Smoked	14.0	23.3	27.8	28.7	38.3	27.3	17.3
Did not smoke	85.8	76.5	70.8	68.6	53.7	68.2	82.2
Not stated	0.2	0.2	1.4	2.7	8.0	4.5	0.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
				Age- standadised ratio [a]			
Smoked	**1.00**	**1.50**	**1.70**	**1.69**	**1.86**	**__**	**1.19**
%95 confidence interval		**1.45-1.54**	**1.65-1.76**	**1.58-1.80**	**1.73-1.99**	**__**	**1.17-1.20**

(a) The ratios were indirectly age-standardised using as the standard, the age-specific rates of smoking in pregnancy for women who gave birth in 2003 whose area of usual residence was major cities.

Note: Excludes 118 non-resident mothers.

WE ARE ALSO REMINDED THAT

'the proportion of mothers who smoked was lowest for mothers usually resident in major cities (14.0%) and increased with increasing remoteness to 38.3% for mothers usually 21 resident in very remote areas' [15] Although not relevant to the central theme of this paper, nevertheless, the researchers' examined the influence of the 'country of birth' on 'smoking in pregnancy rates '. Although not conclusive, given the data available from this study, the difference between smoking in Australia and New Zealand (both with distinct indigenous populations') and those of the United Kingdom is worth noting. As the researchers point out 'Mothers born in New Zealand reported marginally higher rates of smoking than mothers born in Australia (23.3% and 20.5% respectively). Of mothers born in the United Kingdom, 12.6% smoked during pregnancy.'[16] The following table reveals, on a population basis alone, significant differences in smoking rates between the aforementioned countries.

Table 3.6: Mothers tobacco smoking status during pregnancy, by Country of birth, 2003

Smoking status	Australia	New zealand	United Kingdom	Other countries	Not stated	total
			Number			
Smoked	20,577	734	642	1,238	214	23,405
Did not smoke	79,345	2,406	4,428	23,953	1,047	111,179
Not stated	582	8	16	39	2	647
Total	**100,504**	**3,148**	**5,086**	**25,230**	**1,263**	**135,231**
			Percent			
Smoked	20.5	23.3	12.6	4.9	16.9	17.3
Did not smoke	78.9	76.4	87.1	94.9	82.9	82.2
Not stated	0.6	0.3	0.3	0.2	0.2	0.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

SO FAR,

when examining the evidence regarding smoking among pregnant women, specifically indigenous women, the outlook would appear to be fairly bleak. However, the Federal, State, and Territory governments have not been idle. All Australian Governments' have signed up for the comprehensive 'Closing the Gap' programme, part of which addresses smoking, and its reduction, among the Australian indigenous community. In the Federally-issued report on the progress of the 'Closing the Gap' initiative. issued in 2020, the Prime Minister, in the 'Minister's Forward' of the report, reminds us all that 'In March 2019, I entered into the Partnership Agreement on Closing the Gap, a landmark agreement to work together to develop the new Closing the Gap framework.

15. Smoking and pregnancy Paula Laws Narelle Grayson Elizabeth A Sullivan August 2006
16. Ibid

It's a commitment by the Commonwealth, all states and territories, the Australian Local Government Association and the Coalition of Aboriginal and Torres Strait Islander Peak Organisations to work together in genuine partnership'[17] He readily concedes that 'Progress against the Closing the Gap targets has been mixed over the past decade' [18] The report submits that we can see improvements in the below key areas

as follows:

TARGET NO 1	The target to halve the gap in child mortality rates by 2018 has seen progress in maternal and child health, although improvements in mortality rates have not been strong enough to meet the target.
TARGET NO 2	The target to halve the gap for Indigenous children in reading, writing and numeracy within a decade (by 2018) has driven improvements in these foundational skills, but more progress is required.
TARGET NO 3	There has not been improvement in school attendance rates to close the gap between Indigenous and non-Indigenous school attendance within five years (by 2018).
TARGET NO 4	The national Indigenous employment rate has remained stable against the target to halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade (by 2018)

But there have been successes. Two of the continuing targets are on track: firstly, '95% of indigenous four-year-old's to be enrolled in early childhood education by 2025' is hitting the milestones so far. Similarly, 'he targets to halve the gap for Indigenous Australians aged 20–24 in Year 12 attainment or equivalent by 2020 has reached its stated target. However, the following statement in the report, 'the target to close the gap in life expectancy by 2031 is not on track'[20] , probably indicates that the reduction in smoking initiatives' have yet to be successful enough to translate into overall reduction in the life expectancy gap. Confirming this supposition, the report adds that 'It is important to note that population health interventions, such as smoking reduction, have a long lead time before measurable impacts can be seen'[21] .

SO WHERE TO FROM HERE?

Chamberlain and others examined a series of reviews conducted among indigenous communities and, as a result, concluded that there should be seven priorities[22] adopted to make a meaningful inroad into the reduction of smoking in Australian indigenous communities. It is expected that these will be taken into account by the government groups designated as responsible for the 'Closing the Gap' initiatives. **They are as follows:**

Priority No 1: Continue to Reduce Affordability Of Tobacco Product

Priority No 2: Protect Public Health Policy Including Tobacco Control Policies from Tobacco Industry Interference

Priority No 3: Consider Further Regulation of Contents, Product Disclosure & Supply of Tobacco Products & Alternative Nicotine Delivery Systems

Priority No 4: Strengthen Mass Media Campaigns

Priority No 5: Provide Greater Access to A Range Of EvidenceBased Cessation Services to Support Smokers to Quit

Priority No 6: Reduce Exceptions to Smoke-Free Workplaces, Public Places and Other Settings

Priority No 7: Eliminate Remaining Advertising, Promotion And Sponsorship of Tobacco Products

17. Ibid
18. Australian Government 'Closing the Gap' Report 2020
19. Ibid
20. Ibid
21. Ibid
22. Ibid
23. Approach to Aboriginal tobacco control to maintain the decline in smoking: an overview of reviews among Indigenous peoples Catherine Chamberlain Susan Perlen Sue Brennan

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