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# Longitudinal research into petrol sniffing and other substance abuse trends in Indigenous communities: final report

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**A report for the National Indigenous Australians Agency, Health and Wellbeing Branch**

**Note: Communities that participated in this study are not identified in this report.**

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# Abbreviations & glossary

| | |
|---|---|
| AHP | Aboriginal Health Practitioner |
| AOD | Alcohol and Other Drugs |
| Avgas | Aviation fuel |
| DPMC | Department of the Prime Minister & Cabinet (Indigenous Affairs Group) |
| Gunja | Term used in many Indigenous communities for cannabis. |
| LAF | Low Aromatic Fuel |
| NIAA | National Indigenous Australians Agency |
| PCYC | Police Citizens Youth Club |
| PSS | Petrol Sniffing Strategy |
| PULP | Premium Unleaded Petrol |
| RFQ | Request for Quotation |
| RULP | Regular Unleaded Petrol |
| UQ | The University of Queensland |
| VSA | Volatile Substance Abuse (in practice, used interchangeably with VSM) |
| VSM | Volatile Substance Misuse |
| YSR | Youth, Sport & Recreation |

# Acknowledgements

This report and the research project behind it have been helped by many hands. While the people in communities who made time available for fieldwork interviews or associated activities cannot be named for ethical reasons, there are others whose contributions can and should be acknowledged: Meg Selman, who oversaw arrangements between fieldworkers and the communities they visited, and Nyree Divitini and Cathy Swart from the Faculty of Medicine, University of Queensland, who managed a range of administrative issues at the UQ end.

# 1. Executive summary

## 1.1 Introduction

This report presents findings of a research project commissioned by the Australian Government Department of the Prime Minister and Cabinet (DPMC)[1] in 2017 to examine the continuing impact of Low Aromatic Fuel (LAF) as a deterrent to petrol sniffing in Australian Indigenous communities. It is based on fieldwork conducted in 25 Indigenous communities between December 2017 and October 2018.

## 1.2 Prevalence of petrol sniffing

Petrol sniffing is a form of volatile substance misuse (VSM) – that is, the deliberate inhalation of chemical compounds (inhalants) that emit fumes at room temperature, in order to become intoxicated. In Australia, petrol sniffing has long been a form of VSM associated with young people in some remote Indigenous communities, where it has generated harms to users themselves, their families and communities.

The total number of people defined as currently sniffing petrol in the 25 communities was 121. This represents just under 1% of the estimated resident population aged 5-39 years in these communities. In 11 of the 25 communities in the study, comparable data is available from four previous surveys of petrol sniffing prevalence, conducted between 2006 and 2013-14. In these communities, the total estimated numbers of people currently sniffing petrol fell from 453 in 2006 to 22 in 2018 – a decline of 95.2%.

Levels of petrol sniffing and trends in prevalence varied between regions. In six of the 11 regions included in the study, the rate of petrol sniffing – calculated as the number of current petrol sniffers per 1,000 resident population aged 5-39 – declined between 2013-14 and 2018. In four regions there was little or no change, while one region recorded an increase.

## 1.3 Use of other drugs

Notwithstanding the overall decline in petrol sniffing, VSM continues to occur in many communities, both through sniffing of Regular Unleaded Petrol (RULP, reported in 16 communities), Premium Unleaded Petrol (PULP) and – in some communities – LAF. Other volatile substances are also inhaled, especially deodorants (reported in 19 communities), spray paints, glue and aerosols. Most of this use is occasional and opportunistic rather than regular.

Alcohol and cannabis are the drugs causing the most serious concern in most of the study communities. Alcohol was reported as being in regular use in 22 communities, and occasionally present in two others. Cannabis was reported as being in regular use in all 25 communities, and a serious problem in 20 communities.

Ice was reported to be present in 8 of the 25 communities, though in all but one case its use was described as occasional rather than regular and it was not said to be a serious problem. In the one exception, Ice was

[1] On 1 July 2019 the Indigenous Affairs portfolio was moved through a Machinery of Government change to form the National Indigenous Australians Agency (NIAA)

said to be in regular use – alongside alcohol and cannabis - and there were fears that it might become more widespread.

## 1.4 Impact and acceptability of LAF

LAF continues to be widely valued in communities as an initiative that has helped to reduce petrol sniffing and the harms associated with it. In some communities, however, support for LAF was qualified by a continuing belief that LAF was harmful to vehicle engines, and/or small engines such as outboard motors, lawnmowers and quad bikes. Although these allegations have been shown by independent tests to be unfounded, their persistence poses an ongoing challenge to the LAF program, as they can undermine community support for LAF.

## 1.5 LAF and drug substitution

Although some petrol sniffers gravitate to using cannabis or alcohol, the available evidence does not suggest that this is attributable to LAF replacing RULP in communities. Rather, it is a product of a context in which most drug use by young people takes the form of opportunistic poly-drug use, driven by the availability and cost of different substances. As people grow older, they are more likely to gain access to alcohol and/or cannabis, and less likely to sniff volatile substances. However, some people will turn to volatile substances when their access to cannabis or alcohol is disrupted.

## 1.6 Youth, sport and recreational services

Youth, sport and recreational (YSR) services in communities have long been recognised as an influence on demand for volatile substances and other drugs among young people. This study identified five factors that combined to shape the availability and use of YSR services. These were: staffing, funding, facilities, activities, and engagement and participation by young people. In 13 out of the 25 communities, difficulties were reported in recruiting and retaining staff. The adequacy of YSR funding was difficult to assess, in part because recruitment difficulties resulted in under-spending in some communities. Some communities appeared to have good facilities, while in a small number, facilities were described as run down. In others, access to facilities by community members was restricted or hampered by limited operating hours. YSR programs offered a wide range of activities, although in some communities, concerns were raised by the limited number of options available other than sports. Finally, despite considerable resources being made available for YSR programs in communities, challenges remain in engaging young people at risk of sniffing petrol or other drug use.

## 1.7 Conclusions

The study demonstrates the benefits of LAF in Indigenous communities, but also reveals limitations of the program. The main benefit is the contribution of LAF to reducing petrol sniffing or – where sniffing levels have already dropped following earlier introduction of LAF – to maintaining current low levels.

These benefits flow on to other domains, in particular in reduced social disruption in the community and less harm to sniffers themselves. In most communities studied, these changes are now well entrenched. However, they are not irreversible. Many informants who are old enough to remember high levels of sniffing prior to the introduction of LAF believe that, should LAF cease to be available, these levels could return, together with the harms entailed.

The findings of the study, when combined with evidence from earlier studies of the LAF rollout, also demonstrate that the benefits of the LAF program are *sustainable*. In light of these observations, we

conclude that continuation of the LAF program is vital to the health and wellbeing of young people in Indigenous communities with a history of petrol sniffing.

The limitations in the LAF program as revealed in this study are of two kinds. Firstly, the benefits of LAF are a function not only of the availability of LAF in a community, but also of the extent to which LAF supplants RULP as a vehicle fuel. This in turn depends upon whether RULP is available at a regional rather than merely a community level. Secondly, replacement of RULP with LAF does not, in itself, reduce demand for volatile substances or other drugs. This study shows that young people who want to sniff inhalants are able to access a range of products, in many cases despite concerted efforts by communities to make products such as deodorants, spray paints and glues inaccessible. There is also anecdotal evidence that some young people in some communities are sniffing LAF, despite its non-intoxicating properties.

If the benefits of the LAF program as a supply reduction strategy are to be fully realised, the factors that drive demand for volatiles substances and other drugs among young people need to be identified and addressed.

## 1.8 Recommendations

In light of our conclusions, we make the following recommendations[2].

1. We recommend that the Australian Government continue to support and resource the rollout of LAF, on the grounds that:
   - the LAF program has been shown to be effective in reducing petrol sniffing in Indigenous communities and has thereby reduced the harms to the health and wellbeing of Indigenous people, especially youths, that flow from petrol sniffing;
   - the program has been shown to enjoy widespread community support, and
   - should the program *not* be continued, it is likely that the high levels of petrol sniffing and associated harms present in some communities prior to the rollout of LAF would return.

2. We recommend that, in communities where the potential benefits of LAF are undermined by continuing accessibility of RULP outside the community, the Australian Government make further efforts to reduce its accessibility at a regional level. These efforts should include consideration of using the *Low Aromatic Fuel Act 2013* to declare low aromatic fuel areas.

3. We recommend that, in light of the continuing need in communities for adequately resourced youth, sport and recreation (YSR) programs that engage young people, national, state and territory governments commit to resourcing programs, paying particular attention to:
   - challenges in recruiting and retaining staff;
   - funding activities and services;
   - providing appropriate facilities, and
   - meeting the needs of children aged under 12 years, who are sometimes excluded from current programs.

[2] In addition to the five recommendations listed below, the report prepared for the Department of the Prime Minister & Cabinet contains a sixth recommendation that refers to services in specific communities. The sixth recommendation has been omitted from this version in order to protect the anonymity of participating communities.

4. We recommend that, in light of evidence of continuing VSM – including possibly inhalation of LAF – by young children (aged less than 12 years) in some communities, the Australian Government cooperate with state and territory governments in supporting Indigenous communities and organisations to develop evidence-based, culturally appropriate options for prevention and treatment. In doing so, governments should recognise that:
   - VSM by children is often part of a pattern of opportunistic, multiple-drug use shaped by availability of substances;
   - in many communities, cannabis is much more widely used by young people and regarded as a more urgent problem than VSM;
   - amongst older youths, alcohol is also widely consumed in some communities and seen by many community members as a major problem.

5. We recommend that the Australian Government, in cooperation with petrol manufacturers and other stakeholders as appropriate, prepare and disseminate educational resources to address three issues that currently threaten to undermine the impact of LAF:
   - continuing concerns among some people about perceived harmful effects of LAF on small engines such as outboard motors and lawn-mowers;
   - lack of knowledge and in some cases erroneous beliefs about differences in colour between LAF, RULP and PULP, arising partly from recent changes in addition of dyes to various kinds of petrol);
   - lack of awareness among some visitors to communities stocking LAF – including contractors and tourists – about the nature and purpose of the LAF program, and their obligations with respect to importation and use of RULP and other volatile substances.

Finally, we draw attention to other factors which, directly or indirectly, are likely to influence drug use including VSM among young people in Indigenous communities. These include the presence of inter-generational trauma in many families, chronic overcrowding, lack of food security in many households, financial difficulties, and lack of employment opportunities. We do not make recommendations about these because their effects are not specific to VSM, and they require attention in their own right, not because they might lead to VSM.

Addressing the factors that drive demand for volatile substances and other drugs among young Indigenous people will enable the full benefits of what is already a highly successful VSM supply reduction program to be realised, thereby making a significant contribution to Indigenous health and wellbeing.

# 2. Introduction

Since 2005, the Australian Government has provided financial and other support for the production and distribution of Low Aromatic Fuel (LAF) as a deterrent against petrol sniffing in Indigenous communities. As indicated above, petrol sniffing is a form of volatile substance misuse (VSM) – that is, the deliberate inhalation of chemical compounds known as inhalants that emit fumes at room temperature - in order to become intoxicated. There are literally hundreds of products, readily available in supermarkets and other outlets, that contain inhalants, but in Australia – and in some other parts of the world among Indigenous populations – petrol sniffing has been a particularly widespread form of VSM among young people.

LAF is used in place of Regular Unleaded Petrol (RULP) as a fuel for vehicles and other engines. Its introduction in 2005 followed a series of community-based supply reduction initiatives in several Indigenous communities, originating in the early 1990s and initially involving the use of aviation fuel – known as Avgas – as a replacement for RULP[3]. LAF contains no more than 5% of aromatic hydrocarbons – much less than RULP – and for this reason inhaling it does not lead to intoxication (although it can still be harmful if inhaled since, like other volatile substances, it can displace oxygen from the lungs). The first LAF was launched by BP Australia under the brand name Opal as a 91 Octane fuel suitable for use in all engines designed for 91 Octane RULP. From 2014, Viva Energy Australia (formerly Shell Company of Australia) also began producing LAF. The Australian Government support under the LAF program is designed to offset the high production costs of LAF and enable it to be sold at a similar price to RULP.

The program has proved highly popular. By July 2012, a total of 123 sites throughout regional and remote Australia stocked LAF, including 74 Indigenous communities, 40 service stations or roadhouses, and nine 'other' outlets (Senate Community Affairs Legislation Committee, 2012). As of 2018, the total number of LAF outlets had risen to approximately 175.

The rollout of LAF has been monitored through several previous studies (d'Abbs & Shaw, 2007, 2008; d'Abbs & Shaw, 2016; d'Abbs et al., 2017). The most recent of these involved estimating the prevalence and patterns of petrol sniffing in 41 communities. The study found that the introduction of LAF on a regional basis had been associated with a continuing decline in numbers of young people in remote communities sniffing petrol. In the 41 communities, the number of people sniffing petrol declined from 289 at the time of the first data collection (2011-12) to 204 at the time of the second data collection (2013-14) – a fall of 29.4%. Over the longer term, the decline in petrol sniffing had been even more marked. In 17 communities from the study sample, comparable data was also available from two earlier studies, conducted in 2005-06 and 2007-08 respectively. In these 17 communities, the number of people sniffing petrol had fallen from 647 in 2005-06 to 78 in 2013-14, a reduction of 87.9% (d'Abbs & Shaw, 2016).

The present study uses a similar methodology to previous studies to gauge current patterns of petrol sniffing, this time in 25 communities, and to gather qualitative data on other drug use, evidence of substitution of other substances for petrol, and the acceptability and place of LAF in the community. The study was commissioned by the Australian Government Department of the Prime Minister and Cabinet (DPMC) in 2017.

[3] For accounts of the historical evolution of what became the LAF program, see (Burns, Currie, Clough, & Wuridjal, 1995; d'Abbs & MacLean, 2011; d'Abbs, Shaw, & Field, 2017; Roper & Shaw, 1996; Shaw et al., 2004).

The report begins with a description of research methods used in the study. This is followed by a section presenting findings on current prevalence, patterns and trends in petrol sniffing in the 25 communities. Subsequent sections describe findings relating to use of other volatile substances, alcohol, cannabis and 'Ice' respectively; an assessment of the impact and acceptability of LAF in communities, and an examination of youth, sport and recreation services in communities. A final section discusses implications of the findings and makes recommendations.

## 2.1 Ethics approval

The project received ethics approval from the University of Queensland Human Research Ethics Committee (approval no 2017001630).

# 3. Methods

Like earlier studies of the impact of LAF, this study gathered both quantitative and qualitative data. Quantitative estimates of the prevalence and patterns of current petrol sniffing were derived by using a key informant method, in which selected key informants are asked to act as 'proxy respondents' (Clough et al., 2004; Nelson, Longstreth, Koepsell, & van Belle, 1990) by identifying individuals in specified age-gender categories who currently sniff petrol. For these purposes, 'current' was defined as having engaged in petrol sniffing at least once within the preceding 6 months. The age categories used were tailored to local perceptions, namely:

- Primary school aged girls
- Primary school aged boys
- Young women - high school, too young to go to pub
- Young fellas – high school, too young to go to pub
- Older women (up to 40 years of age) – people who can buy grog
- Older men (up to 40 years of age) – people who can buy grog.

Three frequency categories are used:

- Occasional/experimental: believed to have sniffed petrol or other inhalant at least once in past 6 months, but no evidence of regular use;
- Regular: believed to have sniffed petrol or other inhalant regularly over past 6 months but does not meet criterion of heavy use (i.e. at least once a week);
- Heavy: believed to have sniffed petrol or other inhalants at least weekly (whenever inhalants are available) over past 6 months.

Proxy respondents were in most instances Aboriginal Health Practitioners (AHP) based in the community, with two or three AHPs per community taking part. The fieldworkers did not record names or other identifiers of any individuals, but used the information provided to estimate the numbers of current male and female petrol sniffers according to four age-group categories as set out in Table 3-1 below.

**Table 3-1: Age-gender categories used to describe patterns of petrol sniffing**

| Age | Gender | Occasional | Regular | Heavy |
|---|---|---|---|---|
| 5-9 | M<br>F | | | |
| 10-14 | M<br>F | | | |
| 15-24 | M<br>F | | | |
| 25-39 | M<br>F | | | |
| Total | M<br>F | | | |

In addition to gathering quantitative data from proxy respondents, fieldworkers were asked to conduct interviews and carry out observations during the 2 – 3 days they spent in communities with a view to gathering qualitative data on:

- Use of, and problems associated with, other substances used as recreational drugs'
- Community acceptance and awareness of LAF,

- The impact and any perceived unintended consequences of LAF, and
- The role of other factors affecting patterns of petrol sniffing and other drug use in the community.

Fieldworkers were instructed to attempt to identify and speak with community members who, for whatever reason, were regarded as being particularly well informed regarding young people's issues, and service providers, including police, school staff, youth services, and shire/council staff. Edited versions of the data collection instruments used in the study are reproduced in Appendix A of this report.

In all, 271 individuals were interviewed in the 25 communities. Some of these represented agencies or services. Table 3-2 lists the main agencies and services involved, and the number of communities in which representatives of the respective agencies were interviewed. As the Table shows, the most widely consulted agencies were health services (including alcohol and other drug services), schools and police.

**Table 3-2: Agencies and services consulted by fieldworkers in communities**

| Agency/service | No communities |
|---|---|
| Health services (including AOD services) | 25 |
| Schools | 15 |
| Police | 13 |
| Councils | 12 |
| Youth, sport & recreation | 11 |
| PM&C | 10 |
| Shop, store | 7 |
| Children's services | 6 |
| Women's shelter, safe house | 3 |
| Night patrol | 3 |
| Other | Various* |

*This refers to several agencies, each of which was consulted in fewer than 3 communities.

## 3.1 Sample of communities

Communities in the present study were selected on the basis of meeting three criteria: (1) their geographic relationship to areas designated as 'low aromatic fuel areas' under the *Low Aromatic Fuel Act 2013* and/or (2) they had been included in earlier studies of the rollout and impact of LAF, and therefore provided a basis on which to assess trends in petrol sniffing; and/or (3) they were communities in which volatile substance abuse was believed to be an emerging issue. In addition, communities were included in the study only if they agreed to do so.

A sample of 25 communities was endorsed by DPMC following discussions between the Consultant and DPMC. Selected communities were then invited to take part in the study; all agreed to do so. The communities are listed in Table 3-3 below. They included 11 communities for which longitudinal data from four previous studies dating back to 2005-06 are available, and 22 communities that were included in the 2011-14 study. The sample also included three communities that have not been included in recent studies.

**Table 3-3: Communities in study**

| Region | ID* | Data for all 4 previous studies | Included in 2011-2014 study |
|---|---|---|---|
| Far North Qld/Gulf of Carpentaria | 69 | Y | Y |
| | 78 | Y | Y |
| | 80 | N | Y |
| Barkly (NT) | 45 | N | Y |
| | 48 | N | Y |
| | 49 | N | Y |
| Central Aust (NT) | 36 | Y | Y |
| | 38 | Y | Y |
| East Arnhem (NT) | 59 | Y | Y |
| | 65 | N | N |
| | 67 | N | Y |
| Katherine (NT) | 50 | N | Y |
| | 53 | N | Y |
| | 81 | N | N |
| Top End (NT) | 58 | N | Y |
| | 57 | Y | Y |
| SA non-APY Lands | 23 | Y | Y |
| APY Lands (SA) | 28 | Y | Y |
| | 24 | Y | Y |
| East Kimberley (WA) | 15 | Y | Y |
| Goldfields (WA) | 14 | N | Y |
| | 82 | N | N |
| | 12 | N | Y |
| | 13 | N | Y |
| Ngaanyatjarra (WA) | 1 | Y | Y |

*The ID is a 'key' for use in linking published versions of this report with unpublished versions in which communities are identified.

## 3.2 Fieldwork

The project involved site visits of several days duration to each of the 25 communities in the sample. Fieldwork commenced in December 2017 and was completed in October 2018. A team of experienced fieldworkers, all of whom had worked on previous studies of the LAF rollout, conducted the site visits. The fieldworkers are also co-authors of this report.

## 3.3 Interpreting data: a cautionary note

Although much of the data presented here is quantitative, caution should be exercised in drawing inferences. Quantification implies precision, which is sometimes illusory. The method developed for estimating prevalence and patterns of petrol sniffing in communities, developed and refined over previous studies, is in our view the best method on offer. But we need to remember that the statement that there are an estimated *x* number of current petrol sniffers in a given community is not based on anyone's direct observation of petrol sniffing in that community at a particular time, or on a population survey of petrol-sniffing practices among community members, but rather on the beliefs of key informants. Further, the prevalence of petrol sniffing in Indigenous communities tends to fluctuate rapidly and markedly, often in conjunction with the arrival of 'ringleaders' who generate a wave of sniffing before, in some cases, being evicted from the community concerned, after which prevalence often drops. The prevalence of petrol sniffing in a community at any one

point in time therefore may not be a reliable indicator of prevalence over a longer period. Finally, the numbers of 'current sniffers' as defined in this study are not necessarily those sniffing at the time fieldwork was conducted, but the estimated numbers who had sniffed petrol on one or more occasions over the preceding six months.

## 3.4 A note about presentation of findings

The text of the report is interspersed with two kinds of indented paragraphs. Those that are not italicised are extracts from fieldworkers' reports of communities, usually edited to remove community or personal identifiers. Those that are italicised are quotations from informants, again edited where necessary to maintain community and individual confidentiality.

# 4. Prevalence and patterns of petrol sniffing

This chapter begins with an account of the number of people reported as sniffing petrol in the sampled communities, and of the rates of petrol sniffing per 1,000 population aged 5-39 years in communities. This is followed by an examination of trends between the most recent findings from an earlier study of the impact of LAF and the current study.

The total number of people defined as current petrol sniffers in the 25 communities was 121. This represents 0.94% of the estimated 12,917 Indigenous persons aged 5-39 years resident in these communities at the time of the 2016 ABS Census of Population and Housing (Australian Bureau of Statistics, 2018). As Table 4-1 shows, two-thirds were male, and more than half (55.4%) were aged 14 years or less. Most (70.2%) were categorised as 'occasional' sniffers.

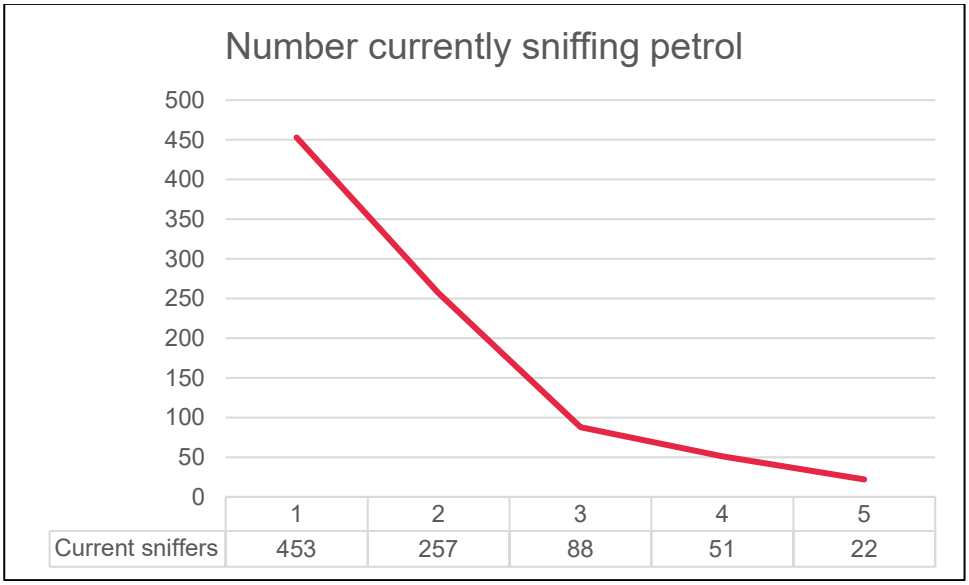
**Table 4-1: Current petrol sniffers, selected characteristics**

| **Age group** | **No.** | **%** |
|---|---|---|
| 5-9 | 11 | 9.1 |
| 10-14 | 56 | 46.3 |
| 15-24 | 50 | 41.3 |
| 25-39 | 4 | 3.3 |
| **Total** | **121** | **100.0** |
| | | |
| **Gender** | | |
| Male | 79 | 65.3 |
| Female | 42 | 34.7 |
| **Total** | **121** | **100.0** |
| | | |
| **Frequency** | | |
| Occasional | 85 | 70.2 |
| Regular | 27 | 22.3 |
| Heavy | 9 | 7.4 |
| **Total** | **121** | **100.0** |

## 4.1 Long term trends

In 11 of the 25 communities in the 2017-2018 study, comparable data is available from four previous surveys of petrol sniffing prevalence, conducted in 2006, 2008, 2012 and 2013-14. In these communities, as Figure 4-1 shows, the total estimated numbers of people currently sniffing petrol fell from 453 in 2006 to 22 in 2018 – a decline of 95.2%

*Figure 4-1: Long-term trends in petrol sniffing prevalence in 11 communities*




In 22 of the 25 communities in the 2017-18 sample, comparison can be made with petrol sniffing prevalence in 2013-14, as reported in an earlier study (d'Abbs & Shaw, 2016). As Table 4-2 shows, the total number of people sniffing petrol in the 22 communities declined from 227 in 2013-14 to 109 in 2018, a fall of 52.0%. While this is obviously a welcome trend, it is not an even one and, as is shown below, conceals several mutually distinct trends. Some of these are revealed in Table 4-2.

**Table 4-2: People currently sniffing petrol, 2013-14 and 2018 (22 communities)**

| | 2013-14 | | 2018 | | % change |
|---|---|---|---|---|---|
| | No. | % | No. | % | |
| **Age group** | | | | | |
| 5-9 | 6 | 2.6 | 9 | 8.3 | 50.0 |
| 10-14 | 87 | 38.3 | 52 | 47.7 | -40.2 |
| 15-24 | 118 | 52.0 | 45 | 41.3 | -61.9 |
| 25-39 | 16 | 7.0 | 3 | 2.8 | -81.3 |
| **Total** | **227** | **100.0** | **109** | 100.0 | **-52.0** |
| | | | | | |
| **Gender** | | | | | |
| Male | 147 | 64.8 | 71 | 65.1 | -51.7 |
| Female | 80 | 35.2 | 38 | 34.9 | -52.5 |
| **Total** | **227** | **100.0** | **109** | 100.0 | **-52.0** |
| | | | | | |
| **Frequency** | | | | | |
| Occasional | 96 | 42.3 | 76 | 69.7 | -20.8 |
| Regular | 56 | 24.7 | 24 | 22.0 | -57.1 |
| Heavy | 75 | 33.0 | 9 | 8.3 | -88.0 |
| **Total** | **227** | **100.0** | **109** | 100.0 | **-52.0** |

Firstly, the trend is uneven across age groups. As Table 4-2 and Figure 4-2 show, the number of very young sniffers – i.e. aged 5 to 9 – rose from six to nine between 2013-14 and 2018, and while the number of current sniffers aged 10-14 years declined over the same period, the fall was most evident in older age groups. Amongst people aged 15 years and older, the number of current sniffers declined by 64.2% compared with a fall of 34.4% among people ages less than 15 years. As a result, in 2018, more than half of current sniffers (56.0%) were aged 14 years or less, compared with just over 40% in 2013-14.

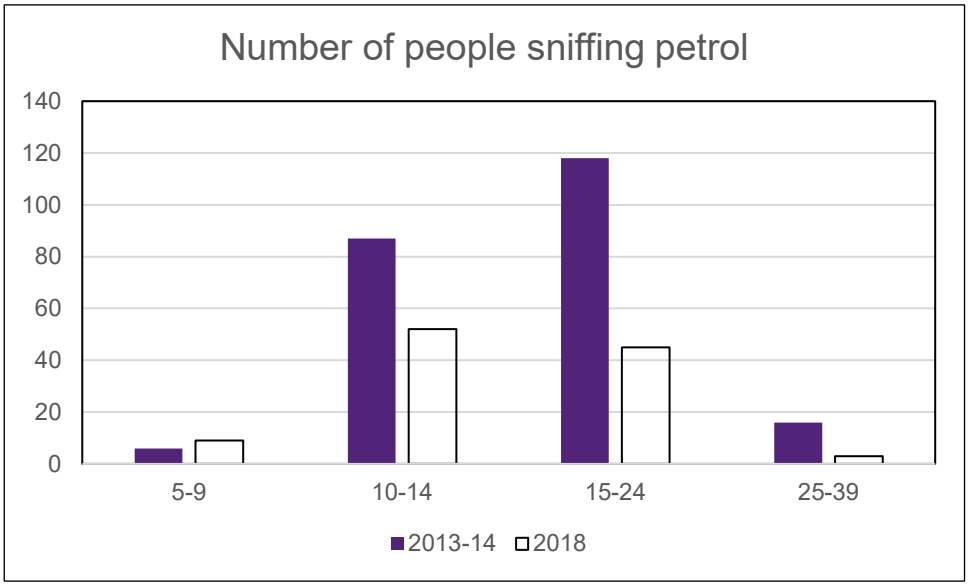



*Figure 4-2: Changes in numbers of people sniffing petrol, by age group*

Secondly, the distribution of sniffing frequencies also changed during the period under review. In 2013-14, one-third of those currently sniffing petrol were classified as 'heavy' users, and one-quarter as 'regular'. The remainder – 42.3% - were classified as 'occasional' users. In 2018, the proportion of 'occasional' sniffers increased to 69.7%, while fewer than one-in-ten sniffers were classified as 'heavy' in 2018 and just over one-fifth as 'regular'. Figure 4.3 depicts these changes.

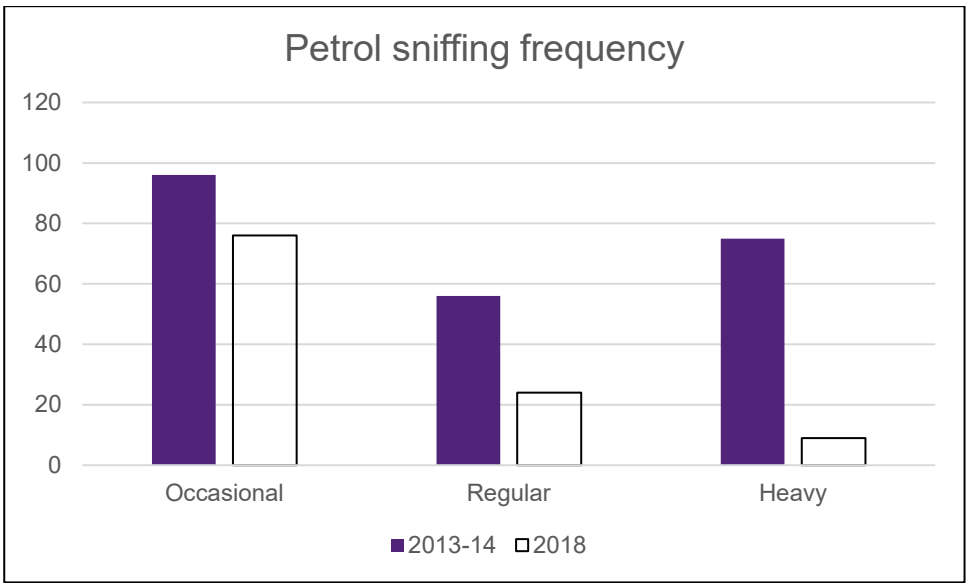



*Figure 4-3: Changes in frequency of petrol sniffing*

As a result of these two shifts, current petrol sniffers are more likely than in the past to be young, occasional sniffers. It is not possible, on the basis of this study, to give an adequate account of either the reasons behind this shift or the implications that follow. While the replacement of regular or heavy petrol sniffing with occasional use is, on the face of it, to be welcomed, prevalence among younger children is grounds for concern. Even describing these patterns is difficult, as most informants with whom we spoke in communities where it was reported admitted to being uncertain as to just what was being sniffed by younger children, let alone how such sniffing occurred or why. In most instances, petrol is not the only inhalant used; rather, it is part of a pattern of occasional, opportunistic inhalation of a range of volatile substances that includes aerosol paints, deodorants and glues as and when these or other inhalants are accessible. As noted below in section 5.1.4, in at least some instances, the petrol inhaled is believed by observers to be LAF. The implications of both the quantitative and qualitative findings with regard to this trend are taken up further in Chapter Five below and in the concluding chapter.

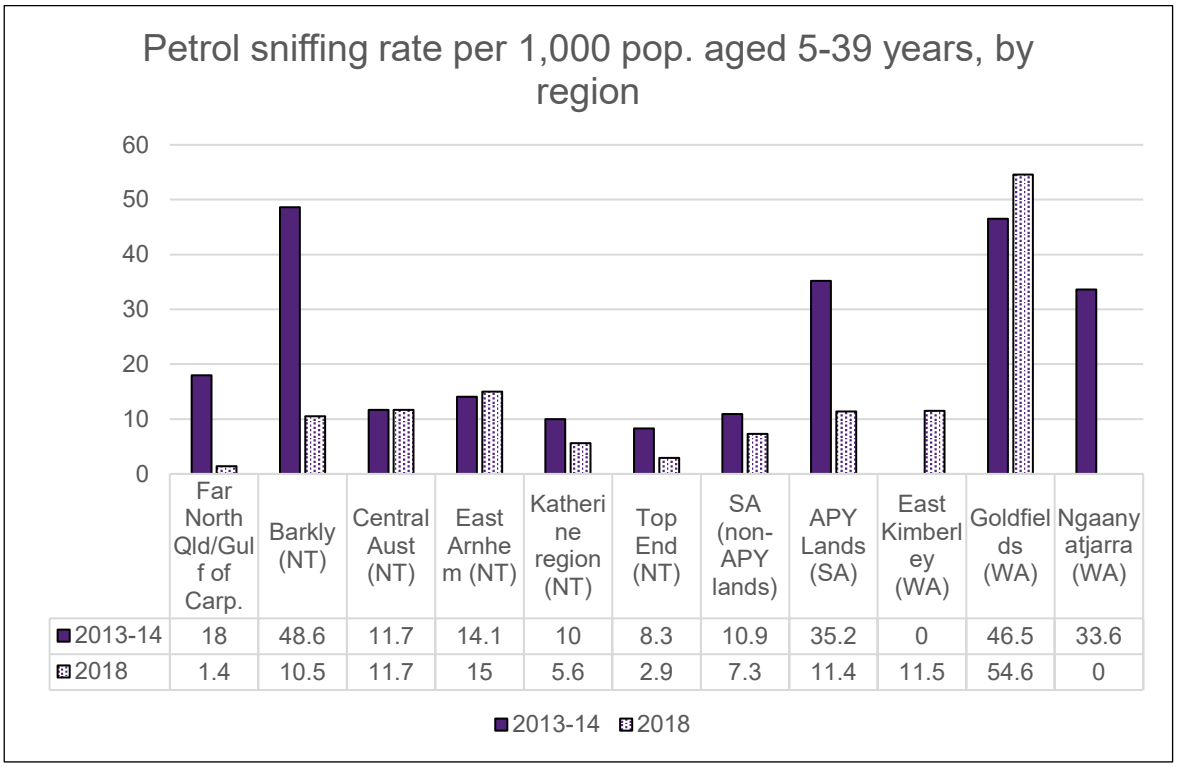
Thirdly, not all communities recorded a decline in numbers of current sniffers. In order to facilitate comparisons between communities, as well as between the different survey times, rates of petrol sniffing were computed for each community. The rate was defined as the number of current sniffers per 1,000 population aged 5-39 years. For 2013-14 rates, the ABS Estimated Resident Population for 30 June 2011 was used as the base. For the 2018 study, the equivalent figure from the 2016 ABS census was used.

Between 2013-14 and 2018 the mean rate of petrol sniffing per 1,000 population aged 5-39 fell from 25.5 to 18.5. However, in small samples such as these, the mean is not a reliable indicator of central tendency, as it is susceptible to being distorted by outliers. A more reliable indicator under these conditions is the median – that is, the observed rate that lies at the mid-point of the 25 observed rates. In 2013-14, the median rate of petrol sniffing in the 22 communities that were also included in the 2018 study was 17.4 per 1,000 population aged 5-39. In 2018, it was 5.5 per 1,000 population aged 5-39 in the 25 communities studied. In 14 communities, the rate of reported petrol sniffing declined between the two surveys. One community recorded no sniffers at both surveys, while all but two of the remaining seven communities recorded small increases – that is, absolute increases of no more than four individuals. Changes of this order cannot be read as indicators of trends, since they fall within the pattern of fluctuating prevalence that characterises petrol

sniffing and other VSM in most settings[4]. Two communities recorded more substantial increases in sniffing rates, although in one of these the number currently sniffing at the time of fieldwork was described by local informants as having declined compared with a few months earlier.

## 4.2 Regional trends

Trends in the prevalence and rates of petrol-sniffing varied between regions. Figure 4-4 summarises the trends graphically at a regional level. Table 4-3 presents more detail, showing changes in the numbers of current petrol sniffers as well as rates of petrol sniffing between 2013-14 and 2018 at a community as well as regional level. The changes are described further following Table 4-3.




| | Far North Qld/Gulf of Carp. | Barkly (NT) | Central Aust (NT) | East Arnhem (NT) | Katherine region (NT) | Top End (NT) | SA (non-APY lands) | APY Lands (SA) | East Kimberley (WA) | Goldfields (WA) | Ngaanyatjarra (WA) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2013-14 | 18 | 48.6 | 11.7 | 14.1 | 10 | 8.3 | 10.9 | 35.2 | 0 | 46.5 | 33.6 |
| 2018 | 1.4 | 10.5 | 11.7 | 15 | 5.6 | 2.9 | 7.3 | 11.4 | 11.5 | 54.6 | 0 |

*Figure 4-4: Trends in rates of petrol sniffing by region, 2013-14 to 2018*

[4] Statistically the change in median sniffing rates between the two surveys was not-significant. A Wilcoxon Signed Rank Test of the difference between 2013-14 and 2018 in the 22 communities found the difference to be statistically non-significant (z = -1.408, p = .159), with a medium effect size (r = .30).

**Table 4-3: Trends in petrol sniffing prevalence by region 2013-14 to 2018**

| | | 2013-14 | | | 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| Region/community | Community ID | ERP 5-39 2011 | Current sniffers | Sniffing rate per 1000 pop. 5-39 | ERP 5-39 2016 | Current sniffers | Sniffing rate per 1000 pop. 5-39 | % change in number of sniffers |
| Far North Qld/Gulf of Carpentaria | | | | | | | | |
| | 69 | | 0 | 0.0 | | 0 | 0.0 | - |
| | 78 | | 0 | 0.0 | | 4 | 4.6 | - |
| | 80 | | 53 | 37.2 | | 0 | 0.0 | -100.0 |
| Total | | 2937 | 53 | 18.0 | 2901 | 4 | 1.4 | -92.5 |
| | | | | | | | | |
| Barkly (NT) | | | | | | | | |
| | 45 | | 17 | 54.3 | | 3 | 11.1 | -82.4 |
| | 48 | | 24 | 87.9 | | 7 | 27.2 | -70.8 |
| | 49 | | 35 | 35.8 | | 5 | 5.5 | -85.7 |
| Total | | 1565 | 76 | 48.6 | 1431 | 15 | 10.5 | -80.3 |
| | | | | | | | | |
| Central Australia (NT) | | | | | | | | |
| | 36 | | 2 | 5.6 | | 0 | 0.0 | -100.0 |
| | 38 | | 5 | 20.8 | | 6 | 30.2 | 20.0 |
| Total | | 596 | 7 | 11.7 | 515 | 6 | 11.7 | -14.3 |
| | | | | | | | | |
| East Arnhem (NT) | | | | | | | | |
| | 59 | | 7 | 12.6 | | 2 | 3.7 | -71.4 |
| | 65 | | | | | 9 | 6.7 | |
| | 67 | | 7 | 16.1 | | 24 | 54.7 | 242.9 |
| Total | | 990 | 14 | 14.1 | 2337 | 35 | 15.0 | 150.0 |
| | | | | | | | | |
| Katherine (NT) | | | | | | | | |
| | 50 | | 6 | 18.7 | | 8 | 23.7 | 33.3 |
| | 81 | | | | | 3 | 3.4 | |
| | 53 | | 4 | 5.9 | | 0 | 0.0 | -100.0 |
| Total | | 1000 | 10 | 10.0 | 1963 | 11 | 5.6 | 10.0 |
| | | | | | | | | |
| Top End (NT) | | | | | | | | |
| | 58 | | 9 | 12.3 | | 4 | 6.9 | -55.6 |
| | 57 | | 8 | 6.0 | | 2 | 1.4 | -75.0 |
| Total | | 2058 | 17 | 8.3 | 2050 | 6 | 2.9 | -64.7 |
| | | | | | | | | |
| SA non-APY Lands | | | | | | | | |
| | 23 | | 2 | 10.9 | | 1 | 7.3 | -50.0 |
| Total | | 184 | 2 | 10.9 | 137 | 1 | 7.3 | -50.0 |
| | | | | | | | | |
| APY Lands (SA) | | | | | | | | |
| | 28 | | 15 | 48.5 | | 5 | 18.7 | -66.7 |
| | 24 | | 3 | 14.8 | | 0 | 0.0 | -100.0 |
| Total | | 512 | 18 | 35.2 | 439 | 5 | 11.4 | -72.2 |
| | | | | | | | | |
| East Kimberley (WA) | | | | | | | | |
| | 15 | | 0 | 0.0 | | 2 | 11.5 | |
| Total | | 321 | 0 | 0.0 | 174 | 2 | 11.5 | |
| | | | | | | | | |
| Goldfields (WA) | | | | | | | | |
| | 13 | | 11 | 50.9 | | 13 | 67.4 | 18.2 |
| | 82 | | | | | 0 | 0.0 | |
| | 12 | | 12 | 44.1 | | 0 | 0.0 | -100.0 |
| | 14 | | 8 | 44.9 | | 23 | 175.6 | 187.5 |
| Total | | 666 | 31 | 46.5 | 659 | 36 | 54.6 | 16.1 |
| | | | | | | | | |
| Ngaanyatjarra (WA) | | | | | | | | |
| | 1 | | 9 | 33.6 | | 0 | 0.0 | -100.0 |

| | | 2013-14 | | | 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| Region/community | Community ID | ERP 5-39 2011 | Current sniffers | Sniffing rate per 1000 pop. 5-39 | ERP 5-39 2016 | Current sniffers | Sniffing rate per 1000 pop. 5-39 | % change in number of sniffers |
| Total | | 268 | 9 | 33.6 | 311 | 0 | 0.0 | -100.0 |
| | | | | | | | | |
| Grand Total | | 11097 | 237 | 21.4 | 12917 | 121 | 9.4 | -48.9 |

### 4.2.1 Far North Queensland and Gulf of Carpentaria

In sampled communities in Far North Queensland and the Gulf region, the rate of current sniffing declined from 18.0 per 1,000 population aged 5-39 to 1.4. The decline was due to a sharp drop in one community where levels of petrol sniffing recorded in 2013 prior to the introduction of LAF were very high (53 current sniffers – a rate of 37.2 per 1,000 people aged 5-39 years).

### 4.2.2 Barkly region (NT)

In the Barkly region of the NT, the numbers of people sniffing petrol declined in all three of the communities visited. The regional total of current sniffers fell from 75 in 2013-14 to 15 in 2018, a decline of 80.3 per cent, equivalent to a fall in the rate of petrol sniffing from 48.6 per 1,000 population aged 5-39 to 10.5.

### 4.2.3 Central Australia (NT)

In Central Australia (NT) there were minimal changes in the levels of petrol sniffing in the two communities included in the sample and no change in the regional rate of sniffing, which remained at 11.7 per 1,000 population aged 5-39.

### 4.2.4 East Arnhem (NT)

In East Arnhem comparison between the two surveys is complicated by the addition of one community that was not part of the 2013-14 sample. As Figure 4.9 shows, the overall rate of petrol sniffing in the region remained almost unchanged. However, this is a product of counteracting local trends: a decline in the number of people sniffing petrol in one community that was more than offset by an increase in another community.

### 4.2.5 Katherine (NT)

In the Katherine region (NT) there was little change in the level of petrol sniffing in one community and a decline in another. Addition of the town of Katherine to the sample in the 2018 study, where the rate of current petrol sniffing was low, contributed to a regional decline in the rate of sniffing from 10.0 per 1,000 population aged 5-39 to 5.6 per 1,000 population. Two other points about Katherine should be noted: first, that since 2016 it has been subject to provisions of the Low Aromatic Fuel Act; second, although the number of people known to be sniffing petrol was very small, a larger cohort of young people were believed to engage in occasional sniffing of aerosol deodorants.

### 4.2.6 Top End (NT)

The two Top End communities in the sample both recorded a fall in the number of current sniffers, resulting in a regional decline from 8.3 per 1,000 population aged 5-39 to 2.9 per 1,000.

### 4.2.7 South Australia

The 2018 study included three communities from South Australia, two of which were located in the APY Lands. In one APY community the number of current sniffers declined from 15 to 5, and in the other, from 3 to 0. The result was a regional decline from 35.2 per 1,000 population aged 5-39 to 11.4 per 1,000. In the non-APY community, the number of sniffers fell from 2 to 1.

### 4.2.8 East Kimberley (WA)

In the single East Kimberley community included in the 2018 study the number of current sniffers increased from 0 in 2013-14 to 2 in 2018. (The visual appearance of the columns for East Kimberley in Figure 4-4 is therefore misleading.)

### 4.2.9 Goldfields (WA)

The four Goldfields communities in the sample included one that had not been part of the 2013-14 survey. It recorded 0 sniffers in 2018. The three other communities recorded diverging trends: little change in one community, a decline from 12 current sniffers to 0 in another, and a substantial increase from 8 to 23 in the remaining community. This was reflected in a regional increase from 31 to 36 current sniffers – an increase of 16.1 per cent. The rate of petrol sniffing in the region rose from 46.5 per 1,000 population aged 5-39 to 54.6 per 1,000.

### 4.2.10 Ngaanyatjarra (WA)

In the single community from this region in the sample the number of current sniffers declined from 9 to 0.

## 4.3 Two examples

In order to contextualise both positive and negative examples of change, we describe here two communities. The first shows the benefits of a regional rollout of LAF.

### 4.3.1 Benefits of a regional rollout

Community A is a small community located on the Barkly Tableland. It has a recent history of sniffing. Several years ago, the local community store switched to using LAF. At the time, not all other outlets in the region followed suit. In February 2016 Tennant Creek township and the nearby Threeways Roadhouse were formally designated as Low Aromatic Fuel Areas under the *Low Aromatic Fuel Act 2013*, with a result that RULP could no longer legally be sold in these locations. The result was that all outlets within 300 km of the community, including Tennant Creek, switched to LAF. The pattern of sniffing referrals to the Central Australian Youth Link-up Service (CAYLUS) reflects the changing impact of LAF in the community. Up until late 2016, despite the local store stocking LAF, referrals continued. Then they declined.

At the time of fieldwork for this study, three people – one aged 10-14, two aged 15-24 – were identified as regular sniffers. The fieldworker reported a unanimous view amongst those interviewed that LAF introduction in the region had been beneficial, mainly because it had reduced the level of sniffing in the community. A number of young people who were heavy sniffers and who had caused lots of problems for themselves and others no longer sniffed. Some had become engaged in community, with jobs and young families. Others had ongoing mental health and substance misuse issues.

### 4.3.2 The costs of not having access to LAF

The second example shows what can happen when LAF ceases to be available, and also helps to contextualise petrol-sniffing as a behaviour embedded in other forms of volatile and other substance misuse, in settings where opportunities for young people are sparse. The description is drawn from the fieldworker's report on a town located in the WA Goldfields. It is a service centre of the local area for the local Aboriginal people, the pastoral and mining industries. People who work on the mines in the area do so on a fly-in fly out basis. The community has a community school with a trade training centre, a police station, Department of Child Protection officer and an Aboriginal Medical Service. Most other justice, financial and health services are on a visiting basis. Approximately 85% of the population is Aboriginal.

According to the fieldworker, everyone interviewed reported that petrol sniffing incidents had increased, particularly over the preceding 18 – 24 months. There was consensus too that there had been an increase in sniffing paint, and police reported that paint was often the target for break-ins to mine sites and vehicles. The current levels of petrol sniffing in the community were described as a concern to everyone interviewed.

A major issue said to be facing the community was that neither of the two fuel outlets stocked LAF, with a result that the town had not had LAF for all of 2018. The manager of one store told the fieldworker that when he bought the store two years ago he had asked the Shire if there were any stipulation about stocking LAF and the Shire had told him there was not. He also claimed that his fuel supplier had told him LAF was too hard to get so he did not pursue it. The fieldworker asked the manager whether he would consider getting LAF and he reportedly said that he would be willing to do so.

The fieldworker also approached the other store manager who said he had stopped stocking LAF following a change of supplier early in 2018. He too told the fieldworker that his supplier had claimed it was difficult to source LAF, but the manager indicated that he would be willing to switch over to LAF. Both managers told the fieldworker that they would welcome support from government agencies to support them in the transition.

The community had LAF in place for about three years from late 2014 until late 2017, although not from both outlets at the same time. Community members told the fieldworker they were happy when there was LAF in place as they saw a decrease in petrol sniffing in this period. Despite only one outlet stocking LAF at any time, it had made a big difference.

According to the fieldworker, there was widespread support for stocking LAF. One community member described it as a 'no brainer': 'Why don't we have it? Everyone knows it works out bush'.

The community has also experienced a long history of paint sniffing as a result of its proximity to mines in the region. Other substances reported as being sniffed included fly sprays, deodorants and glue. Young people were said to access RULP from vehicles and motorcycles or from machinery kept in business premises. Paint was said to be usually stolen from mine site sheds or contractor vehicles. Glue and aerosols, the fieldworker was told, were obtained opportunistically from wherever people could find them.

The community was said to be vigilant about preventing young people from accessing these substances but not very successful at controlling it. The stores and the Shire have had cameras installed in their premises as a way of monitoring break-ins which they then pass onto the police.

# 5. Use of other volatile substances

This chapter presents findings relating, firstly, to the use of petrol-related fuels as inhalants and, secondly, to inhalation of other volatile substances.

## 5.1 Varieties of fuel used as inhalants

In the past, evaluations of the impact of LAF have been hampered by lack of clarity over what is meant by the term 'petrol'. In addition to Low Aromatic Fuel (LAF), it covers Regular Unleaded Petrol (RULP) and Premium Unleaded Petrol (PULP), but the usage of the term often obscures these distinctions. It may also include aviation fuel. In the 2011-2014 study, fieldworkers in some communities were told that young people were believed to be sniffing PULP or RULP, but none of the reports were verified and in many cases, informants were not at all certain just what was being sniffed.

In the present study we have attempted to address this gap by gathering systematic data on usage of specific petroleum-related vehicle fuels as inhalants. The data collection procedure did not attempt to quantify the numbers of people using these products, since in our experience it is highly unlikely that informants in communities would be confident in estimating how many people sniffed, say, RULP or PULP. The uncertainty surrounding any such attempt at an estimate is compounded by three factors. Firstly, most volatile substance misuse (VSM) in remote communities, regardless of the substances being sniffed, is clandestine and nocturnal and therefore witnessed by few people other than the sniffers themselves. Secondly, VSM is often opportunistic; some people will sniff whatever is available, when it is available. Thirdly, the recent removal of coloured dyes from RULP and PULP makes it more difficult than in the past to distinguish these fuels from LAF. This change took effect from September 2015, when the Australian Institute of Petroleum announced that the practice of adding a red/orange dye to unleaded petrol sold in Australia – whether as PULP, RULP or E10 - would be phased out over a 12-month period commencing immediately. Although LAF contains a bright yellow dye, the undyed fuels are pale yellow or yellow in colour, making them less readily distinguishable from LAF than previously (Australian Institute of Petroleum, 2015). As we show below, these changes have contributed to confusion in some communities regarding just what some young people are believed to be sniffing[5].

Fieldworkers asked informants whether specified types of petrol were used at all in the community as inhalants and, if so, whether such usage was an occasional or regular occurrence, and whether or not it was regarded as a serious problem in the community. The types were:

- Regular Unleaded Petrol (RULP)
- Premium Unleaded Petrol (PULP)
- Aviation fuel (Avgas)
- Low Aromatic Fuel (LAF)
- Low Aromatic Fuel with other substances added (e.g. polystyrene) (LAF+) .

Table 5-1 summarises responses to these questions. It shows that while regular use of these substances was uncommon, occasional use of several of them was widespread.

[5] Identification of types of fuel today is further confounded by the fact that, prior to 2012, RULP was dyed purple, rather than red/orange.

**Table 5-1: Reported use of petrol-related inhalants 2018**

| Substance | No use | Occasional use | Regular use | Uncertain |
|---|---|---|---|---|
| RULP | 9 | 13 | 3 | |
| PULP | 19 | 6 | | |
| Avgas | 25 | | | |
| LAF | 12 | 10 | | 3 |
| LAF + additives | 18 | 7 | | |

### 5.1.1 RULP

Only nine of the 25 communities in the sample were reported as being entirely free of RULP-use as an inhalant, and in three communities its continuing use was labelled as a serious problem. In more than half of the communities (13 or 52.0%) it was reported as being used occasionally, and not seen as a serious problem. The main pathways by which RULP found its way into some communities were vehicles that had filled up with petrol outside the community and arrived with some fuel still in their tanks, and individuals bringing in containers of RULP for use in small engines such as lawn-mowers. In one community where the first pathway was present, the fieldworker heard three reports of people stealing petrol from cars and counted eight cars that had no petrol caps. Both means of access were present in one Top End community where continued sniffing of RULP was described as still being a problem. As the fieldworker reported:

> RULP is available at several accessible outlets and Darwin is only 300 kms away, which means that if someone fuels up with RULP in Darwin they will still have some in their tanks when they arrive in the community. As a result there are frequent break-ins to visitor and contractors' vehicles. In addition some contractors and *balanda*[6] staff - bring in containers of RULP to use in quad bikes, boats and lawn mowers. Although this is prohibited in the community's VSM Management Plan, it seems that the practice is not monitored and that people sometimes leave containers of fuel in their boats. The police commented that although they can prosecute people coming in with RULP they haven't done so because they don't have time to test the contents of people's tanks.

In other communities informants expressed uncertainty as to what kinds of vehicle fuel were coming into the community. In one community the fieldworker reported:

> A couple of respondents who are closely related to one of the sniffers said that while this person was sniffing petrol he wasn't really high in the way that he used to be with standard unleaded, so this could indicate LAF or a mix containing LAF. RULP is not available within 300kms or more so it is unlikely to be making its way into the community. Premium fuel is readily available at all outlets surrounding the community so it is probable that it is coming into the community in various ways and may be a part of what is being sniffed. In any case, it is widely agreed that there is less sniffing in the community now with LAF rolled out regionally, so this would indicate that no reliable source of an alternative sniffable fuel has been located.

In one Queensland community where LAF had been introduced, informants pointed out that RULP was available in nearby towns and roadhouses that were passed through in the normal course of travel to the community. As a result, vehicles were arriving in the community with anything from pure RULP to a mix of RULP and LAF, to pure LAF. In several communities, informants questioned whether it was possible in

[6] i.e. non-Aboriginal.

practice ever to prevent some RULP from being brought into the community, but added that this did not constitute a major problem for the community.

### 5.1.2 PULP

In six communities, informants reported occasional use of PULP as an inhalant, though in none of these communities was it considered to be a serious problem. Moreover, even in communities where PULP was thought to have been used, the view was closer to a suspicion than an opinion supported by evidence. No-one reported having *seen* people sniffing PULP.

### 5.1.3 Aviation fuel (Avgas)

No episodes of sniffing aviation fuel, known as Avgas, were reported in any of the sample communities during the fieldwork period for this study – i.e. 2018. In 2017, however, the sniffing of Avgas received nationwide media attention after an ABC news report quoted the Chief Health Officer of Miwatj Health in East Arnhem as labelling the practice a 'public health emergency' (Gibson, 2017). The outbreak appears to have commenced around March 2016. In March 2017, a 30-year old man was admitted to Royal Darwin Hospital with acute encephalopathy, found to be due to lead toxicity as a result of sniffing Avgas stolen from aircraft parked in one community in the region. This presentation, together with evidence that Avgas was also being sniffed in at least one other community in the region, prompted a program of testing known petrol sniffers in three East Arnhem communities for blood lead levels. A high proportion were found to have elevated blood lead levels, with 15 being admitted to hospital for chelation therapy.

Subsequently, several measures to improve fuel security were introduced in affected communities. At around the same time, government agencies, community-controlled health services and other organisations came together in a high level VSA Stakeholder Working Group to address problems across the East Arnhem region. An East Arnhem VSA Reduction Action Plan was prepared, covering supply reduction, health monitoring (including monitoring of blood lead levels), youth engagement, community planning and engagement, and community leadership (Northern Territory Department of the Chief Minister, 2018). The NT Government also contracted ARDS Aboriginal Corporation to consult with communities in the region and make recommendations to facilitate communication and engagement with respect to the Action Plan. In a report to the NT Department of the Chief Minister, ARDS has called for the supply reduction measures already in place to be complemented by greater support for measures that build on and strengthen Yolŋu knowledge, culture and families (ARDS Aboriginal Corporation, 2018).

In addition to these events in East Arnhem, fieldwork in this study indicated that isolated episodes of sniffing Avgas had also occurred prior to the period covered in this study in two other communities in the NT. In both cases, local community action appears to have put a stop to the practice.

### 5.1.4 LAF

An unexpected finding of the study was the number of communities in which LAF was reported as being sniffed. These reports, it must be stressed, were anecdotal, and were usually expressed as the informant's belief, rather than unquestionable fact. Sometimes the evidence was no more than circumstantial: an informant in one community told the fieldworker that around Christmas time the previous year they had been losing LAF out of a river pump and, on investigating, had been told that two boys aged around 11 or 12 were sniffing it. Sometimes informants believed that fuel of some sort was being sniffed, and thought that it might be LAF.

In 13 communities (52.0%), LAF was reported as being sniffed either with other substances such as polystyrene (seven communities) or on its own (six communities). In another three communities, informants expressed uncertainty as to whether or not LAF was being sniffed. In only nine communities (36.0%) did informants report that LAF was not being sniffed at all. In no communities was sniffing of LAF – either with or without other substances – described as being any more than an occasional activity involving a small number of people. In no communities was it seen as a serious problem, nor did any informants suggest that it negated the benefits of introducing LAF into the community.

Attempts by informants to describe or explain the use of LAF for sniffing were, by the informants' own admission, speculative – and should be regarded in this light in this report. One AOD worker with extensive experience in the East Arnhem region suggested that when young people inhaled LAF they were not becoming genuinely intoxicated but experienced a brief hypoxic 'high' from deep breathing, together with the social pleasures of a group activity. He added that the parents of these young people, many of whom remembered their own experiences of intoxication with 'the red stuff' – that is, RULP – didn't regard these kids as really sniffing, and in some cases would deny that their children were sniffing, despite the latter smelling of fuel and, in a few cases, sustaining burns.

The fieldworker in one community where sniffing of LAF was believed to occur was told that younger children were not aware that you cannot get high from sniffing LAF. In another community, the fieldworker concluded that sniffing LAF by young people was, in part at least, a form of imitating the drug-taking behaviour of older peers.

> The four sniffers said that they sniffed LAF (the "yellow stuff from the roadhouse") but, when pressed, they said that sometimes "it doesn't get you high but it's cool especially when you torch it". This I interpreted as mimicking drug-use and then igniting the petrol.

Claims that various substances are being mixed with LAF in attempts to generate a 'high' date back to its introduction in 2005, when BP first released Opal fuel. The most widely mentioned one in the early years was polystyrene. Manufacturers of LAF have consistently maintained that no additive will convert it into an intoxicant, but this has not stopped enthusiasts from trying. In the present study, the school principal in one community told the fieldworker that some young people in the school claimed to have mixed sugar with LAF in the hope that this would enhance its potency, while in another community a service provider had been told that boys had been trying to sniff bread soaked in LAF. There were no reports in the present study of people becoming intoxicated from sniffing LAF – with or without other substances.

One practice that informants in four communities suggested may be linked with sniffing LAF as well as other drugs was 'choking', or deliberate self-asphyxiation. Once again, the speculative nature of these suggestions must be emphasised. The only detailed account of choking in this study came from a non-Indigenous service provider in one community with a long history of working with young people, and in this instance the practice was linked to cannabis, not volatile substances. He told the fieldworker that self-asphyxiation had become common in the last 18 months.

## 5.2 Use of other volatile substances

The study found anecdotal evidence of widespread use of other volatile substances, especially deodorants and spray paints. As Table 5-2 below shows, regular use of deodorants as inhalants was reported in three communities and occasional use in another 16 communities. In one community it was considered to be a serious problem. A fieldworker in a Top End community reported:

> On a run with Night Patrol the new sport & recreation worker observed kids who were "out of it" being picked up, smelling of deodorant. According to the store manager deodorant is about to be locked up at the community's request. However aerosol deodorant is freely available at the privately

owned service station located next to the community store as well as in the supermarket in a nearby town.

Use of spray paints was also widely reported, and probably understated, given that at least some of the volatile substances labelled as 'aerosols' would almost certainly have been aerosol paints. As Table 5-2 shows, use of spray paints as inhalants was reported in 15 communities, and aerosol in 10. Sniffing of spray paints was considered a serious problem in two communities. The fieldworker in a WA Goldfields community reported:

> Paint is usually stolen from the contractor's vehicles or from sheds that are not well secured. The police report they have an uphill battle getting contractors to lock up their machinery, equipment and vehicles. They have had to charge contractors for bringing in alcohol and one was caught selling petrol to minors for the purposes of sniffing. Community members stated that they need to keep a close eye on paint and glue as the break-ins into the store and workshops in the community are a result of young people looking for these substances.

**Table 5-2: Reported use of other volatile substances (N=25 communities)**

| Substance | No use | Occasional use | Regular use |
|---|---|---|---|
| Deodorants | 6 | 16 | 3 |
| Spray paints | 10 | 14 | 1 |
| Aerosol | 15 | 9 | 1 |
| Glue | 14 | 9 | 2 |
| Fly spray | 16 | 8 | 1 |
| Hair spray | 19 | 6 | |
| Butane | 22 | 3 | |
| Nail polish | 22 | 3 | |
| Paint thinners | 22 | 3 | |
| Cooking gas | 23 | 2 | |
| Marker paint | 23 | 2 | |
| Solvents n.e.c.* | 24 | 1 | |
| Cockroach 'bombs' | 24 | 1 | |
| Fire extinguishers | 24 | 1 | |
| Paint stripper | 24 | 1 | |
| Pesticides | 24 | 1 | |

*Not elsewhere classified.

As Table 5-2 shows, glue sniffing was reported in 11 communities, and was considered a serious problem in one. Table 5-2 also reveals a large number of other volatile substances used as inhalants in one or more communities, usually on an opportunistic, occasional basis. In one community, the fieldworker reported the results of a recent break-in at the store:

> Fly spray x 20-30 cans stolen, along with four cans of Lynx deodorant, $3,000 cash (no proper safe), cigarettes and lighters. A shirt apparently soaked with fly spray was found on the floor of the store (confirmed by Police OIC). The store manager advised that a staff member had dropped keys outside, so it was an opportunistic break-in. I advised CAYLUS. Police Officer-in-Charge advised that three of those suspected of involvement in the store break-in had previous notifications for sniffing (Fieldwork report, Central Australian community).

Opportunistic use of inhalants sometimes takes place in a context of broader polydrug use. The young people whose 'choking' and use of cannabis were referred to above were also said to sniff spray paint regularly as well as other volatile substances: 'anything they can get their hands on'. They reportedly stole paint from the compound of the brick factory, and were said to prefer black paint. The colour of the paint was reportedly believed by these users to determine how long the effects lasted.

Only three communities reported no use of any of the substances listed here as 'other volatile substances'. Overall, the median number of other volatile substances used per community was 3 (mean 3.3). As Table 5-2 shows, almost all of this usage was occasional. Only three communities reported regular use of one or more of these inhalants. Nonetheless, taken together these findings indicate that occasional use of a variety of inhalants is widespread.

# 6. Use of other drugs

Data was collected from key informants on usage of other drugs in communities, with particular attention on alcohol, cannabis and 'Ice' or crystal methamphetamines. Informants were also invited to nominate any other drugs – legal or illicit – that they believed were being used in the community. As with inhalants, usage was categorised as occasional or regular, and in the case of each substance mentioned, informants were asked whether or not usage constituted a serious problem in the community. The results are summarised in Table 6-1.

**Table 6-1: Usage of other drugs**

| Substance | No use | Occasional use | Regular use | Total | Serious problem |
|---|---|---|---|---|---|
| Alcohol | 1 | 2 | 22 | 25 | 19 |
| Cannabis | 0 | 0 | 25 | 25 | 20 |
| 'Ice' | 17 | 7 | 1 | 25 | 1 |

Alcohol and cannabis emerge as the most serious drugs of concern, as they have done in earlier LAF evaluations. As Table 6-1 shows, alcohol was described as being in regular use in 22 of the 25 communities, and occasionally present in two others. Cannabis was described as being in regular use in all 25 communities. In two communities, fieldworkers also heard reports of occasional use of kava, and in one other community kava was described as being regularly used, but mainly by older people. Kava was not described as a serious problem in any community.

## 6.1 Alcohol

The problems attributed to alcohol misuse by informants in this study are all too familiar, in particular violence, especially domestic violence, and diversion of money from feeding families and other household needs. Some fieldwork reports presented a bleak picture. In one community in the Barkly region, the fieldworker was told:

> *Grog is out of control. Sly grog is coming in from Queensland almost on a daily basis. There is a significant increase in DV cases, more fights, poor attendance at school because the kids don't get to sleep. It's never been so bad. It's cheap, there is easy access, no deterrent cos the police aren't here, the community are not reporting it and we've had five or six alcohol related deaths in the last couple of years.*

The fieldworker was told by many people that the lack of a constant police presence was considered to be a significant factor. He reported that while he was there, four young men were drinking openly outside the shop, adding 'There is no safe house in the community'.

In some communities, alcohol problems were described as being intermittent rather than constant. In one community in East Arnhem region where fewer than half of men and women alike were said to drink regularly, the acting clinic manager stated that the clinic did not see many alcohol-related presentations:

*It's a dry community. There's grog now and then when there are break-ins. It's cyclic. Young fellows break in [to a liquor outlet outside the community] and get grog, then there's nothing for months. It's not readily available here. The police are quite good at controlling it when they use the dogs and regularly check at the barge.*

In one community in the APY Lands the fieldworker reported that alcohol controls had brought about a significant improvement:

> There is a consensus view that the levels of alcohol consumption have decreased quite dramatically in the community over the last few years. People saw this as being due to the following reasons: easy and plentiful access to gunja; the cessation of alcohol sales to Anangu in a nearby roadhouse; alcohol restrictions in Alice Springs making it difficult to purchase alcohol and then bring it back to the community; a permanent police presence in the community; a tightening of roadworthy vehicle checks and stricter road rules, and consistent monitoring by local police of the Bush Bus transport service in and out of Alice Springs for contraband alcohol.

Here, as in some other accounts, alcohol emerges as a *regional* as well as a community issue: the impact of alcohol in a community is in part a function of what happens in the towns, where much of the alcohol consumed by community members is purchased. The dilemmas that these relationships pose for communities trying to manage alcohol are apparent in the fieldwork report from one Top End community.

> It seems that the biggest effect of alcohol on the community is from people going to Darwin, becoming long grassers, abrogating parental responsibilities, losing their jobs, and only coming back when they run out of money and are sick.
>
> *Some people don't want to stay here because it's a dry area; want to spend all their money in Darwin long grassing. When they run out they ring wife: 'send me more money' so they can buy more. [Indigenous AOD worker]*
>
> During the dry season people drive to Darwin, Katherine and other places for alcohol. Grog runners bring alcohol into the community regularly, coming in during the night or early in the morning to evade detection. There is a push at the moment to establish a social club again at the community. Some individuals and one clan group were said to be strongly in favour, while others were less so. According to the Safe House manager, the women were conflicted about it. On the one hand they wanted to prevent deaths that had been occurring on the road between the community and the nearest liquor outlet (including the drowning of three people at a creek crossing last year); on the other they remember the violence in the community when the club was operating previously. The dilemma was summed up by a senior community leader:
>
> *If a club starts again grog running would drop and also the number of people going to town. If we have club people would go home and be safe, wife would prepare tucker. At this stage people go to Darwin and come back weak and sick. Young ones aren't educated properly – they drink a lot when they go to Darwin because they live in a dry community.*

However, he went on to say, while the club itself had not been the problem previously, the behaviour of people after the club closed had been, with drunkenness and violence occurring. This community was also one of only three in the study where home-brewing was said to have occurred – though in two of these it was described as a past rather than current practice.

## 6.2 Cannabis

Cannabis appears to be even more pervasive than liquor in communities in this study. Qualitative accounts reveal several recurring themes marking cannabis use in communities. Firstly, it is widely described as being 'normalised' in communities – that is, it is seen as part of normal behaviour. This does not imply that everyone in the community smokes cannabis, any more than the normalisation of alcohol in the wider society means that everyone drinks, but it means that there is a general acceptance of cannabis as part of day-to-day life. For example, the fieldworker in one WA Goldfields community reported that cannabis was used by both men and women – though more so by more men – with regular users aged between 12 and 20. A young Aboriginal male resident of a Central Australian community commented:

> *People looking around just to get high. They don't fight – that's alcohol. They walk around looking for gunja... Gunja is like petrol (used to be) you know. 'My big brother is doing it, so why can't I do it?'*

Secondly, as the observation above testifies, cannabis is seen as having a calming effect on people, in contrast to the association of drinking liquor with violence. Thirdly, however, while smoking cannabis is not linked with violence, its absence is; that is, in many communities informants spoke of violence erupting, usually within households, as a result of would-be cannabis users trying to obtain money from other family members to pay for their cannabis.

Finally, while normalised in communities, the reported widespread use of cannabis is viewed by many people in communities as a serious and troubling problem. In addition to the conflicts sometimes precipitated by users trying to obtain money to buy cannabis from other family members, informants saw cannabis use as causing financial pressures on families, child neglect and, in one community, adverse effects on people with pre-existing mental health problems.

## 6.3 Ice

Ice was said to be present in just under a third of communities (eight out of 25), though in all but one case its use was described as occasional and it was not said to be a serious problem. In the one exception, Ice was said to be in regular use and there were fears that it might become more widespread.

Four inter-related themes emerged from fieldworkers' inquiries. Firstly, although there was no clear evidence of widespread use, there was often uncertainty about just how much Ice, if any, was finding its way into communities. In one WA Goldfields community the fieldworker noted that although there were no reports of the consumption of Ice in the community, many respondents suspected it found its way there occasionally.

In a Top End community the fieldworker reported:

> With two exceptions everyone that I asked about Ice use in the community responded in the negative, often adding 'not yet' or 'thank God'. However an Indigenous service provider working with young people told me that there were a 'select few' people who used Ice and brought it in regularly and that one boy who smoked it had ended up on a mental health ward not long ago. Another service provider thought that it was being brought in by some people 'with a strong Darwin connection'.

Secondly, amongst many people Ice is an object of fear. As the fieldworker reported of a Kimberley community:

> There was consensus from all those interviewed that Ice or meth use has not been taken up in the community and people are very fearful of it. Some people commented that people are so scared of what it could do to people that if it was to come to the community they would dob in people straight away to the police.

In some instances, fear of Ice had facilitated a swift community response to its detection. In one Top End community the fieldworker was told about a non-Indigenous contractor who had been kicked out of the community earlier in the year because he had been selling Ice to local kids and had not stopped after he was warned. The fieldworker was also told that a month or so prior to her visit four men from the community had presented at the clinic, apparently after smoking cannabis contaminated with Ice, and that after testing Ice had been detected in their urine. The police had made this public and a number of meetings had been organised to alert the community to the dangers.

In one South Australian community, the fieldworker reported that the universal answer to being asked about the presence of Ice in the community was 'none', closely followed in almost every case by 'not yet'. Ice was said to be community members' biggest fear, as a result of many having seen relatives in Ceduna, Port Lincoln and Adelaide become Ice users.

Thirdly, as in the community cited above, there were numerous reports – some rumours, some references to specific incidents – of cannabis being laced with Ice. A long-time AOD worker in the community cited above told the fieldworker that cannabis users disliked people 'messing' with their cannabis and were terrified of Ice. An Indigenous resident of another community explained how people kept Ice out:

> *The kids here know about it – know what it looks like because of the internet. Older people buying gunja they hold up the bag to the light to check if crystals in the bag and they hand it back if they find it. The word's spread and everyone checks the bag up against the light. (Indigenous community member)*.

In one NT town and in a remote NT community, fieldworkers were told that dealers had attempted to introduce synthetic marijuana, or Kronic[7], laced with Ice. In both cases the attempts had been resisted, but not without cost. In the town, users were said to have begun fighting each other after smoking Kronic laced with Ice, while one had reportedly smoked a cone, walked outside and died of cardiac arrest[8]. In the remote community, the Police Community Engagement Officer told the fieldworker that people had become very afraid of the effects of the synthetic cannabis laced with Ice: *'They think someone is trying to kill them. They get the horrors'*.

Fourthly, in several communities people talked of family members who had become embroiled in using Ice in nearby towns. In one WA Goldfields community, four residents spoke to the fieldworker of family members 'stuck in the Ice' in Kalgoorlie. One of them explained:

> *My daughter's man went down there and he got on it. She stayed here with me and her little daughter but two weeks ago she took her daughter and went down, left her art and everything, and now she is on it. I was there last week and I didn't see her at all. They were taking it in turns on 12 hour shifts to get that stuff. When I left, my granddaughter was hanging onto me - she didn't want me to go – she knew and I knew. I've got to try to get her back up here.*

[7] Kronic is a commercial term for synthetic cannabis.
[8] We have not attempted to verify this report.

In the one community where Ice was rated as a serious problem, it was said to make its way into the community every day, along with alcohol and cannabis. Prior to Ice becoming available, some users were reported to have used speed. A rehabilitation facility in the community ran a treatment program for Ice users and had clients in the program at the time of the fieldworker's visit in August 2018. One person remarked: *"Withdrawals from Ice is scary, if people are withdrawing watch out, they are dangerous!"*

# 7. Impact and acceptability of Low Aromatic Fuel

LAF continues to be widely valued in communities as an initiative that has helped to reduce petrol sniffing and the harms associated with it. The fieldworker's account from one community captures both the benefits of LAF and the continuing legacy of past petrol sniffing:

> There is a widespread view that LAF has had a beneficial impact on the community. It has changed people's habits as generally speaking it is not possible to sniff petrol now. Service providers who have had a long association with the community stated that having Opal has helped with a lot of issues in the community.
>
> Many lives were lost in the community when petrol sniffing was at its peak and caused enormous trauma and grief for family members who still carry the memories of the distress. Community members in their 30s and 40s today grew up in the difficult sniffing years and the legacy of damage caused is still with people. Some of what people are carrying is obvious and is evident in the people with acquired brain injuries. There are a sizeable number of people in wheelchairs in the community who became disabled due to petrol sniffing.
>
> However a less visible legacy also remains of the damage caused by petrol sniffing, manifested in the struggles by parents today to parent well given their own difficult drug and alcohol family histories. The enormous grief and loss they experienced as children affects their abilities today as parents.

In one community in the Katherine region the benefits were considered to be so self-evident that some informants were surprised that anyone would ask whether LAF had been beneficial.

> *Before we had a lot of petrol sniffing. It's dropped because the community so strong and then brought in Opal. We shared that idea with other communities. We don't want that strong fuel. We even remind our staff they have to take strong fuel out of cars so kids can't steal it.*


*Figure 7-1: Poster on the wall in a community Justice Group office*

Many community residents recalled the days before LAF became available, as in this Central Australian community when asked whether LAF had been beneficial:

> *Yes. Because that building over there [points to historic precinct] – they broke everything. Historic buildings. Couldn't sleep. Awake every night (Male Aboriginal community member, youth program team leader).*

The acting manager of a health clinic in an East Arnhem community recalled the legacy of earlier times:

> *Absolutely, without doubt. There's no sniffing. There are people here with brain damage, in their forties and fifties, from sniffing. Because we don't see sniffing, we don't see that brain damage. The stats support Opal. It's better for community people.*

## 7.1 Negative perceptions of LAF

In 12 of the 25 communities in the study, support for LAF was qualified by a continuing belief on the part of some individuals that LAF was harmful to vehicle engines, and/or small engines such as outboard motors, lawnmowers and quad bikes. These views were more frequently voiced by non-Aboriginal than Aboriginal residents, and in many cases appeared to represent a minority view even among non-Aboriginal residents. Several critics of LAF nevertheless supported its presence in the community.

A recent review of the *Low Aromatic Fuel Act 2013* conducted by PM&C concluded that acceptance of LAF was growing among retailers, customers and communities. However, a submission by Viva Energy Australia – which also manufactures LAF – noted the continuing presence of resistance to LAF, based on what it described as 'incorrect information and hearsay about the quality of the fuel and the perceived operability issues' (Australian Government Department of the Prime Minister and Cabinet, 2019, p. 15).

## 7.2 LAF and drug substitution

An inherent limitation in any drug supply reduction measure is that, insofar as it does not address the factors driving *demand* for the drug in question, it may lead not to a net reduction in drug use but rather the substitution of more readily available drugs as alternatives. In settings where, as indicated earlier, cannabis is widely available and its use seen as normal rather than deviant behaviour, this is obviously a pertinent question with respect to LAF.

While drug use patterns vary from one community to another, the fieldwork in this study revealed several common elements. Firstly, most drug use by young people takes the form of opportunistic use of a variety of drugs, with choices shaped by preferences and availability. The most highly preferred drugs are cannabis and alcohol. While some users may develop a preference for particular volatile substances, most VSM is by people who do not have access to cannabis or alcohol, either because they are not old enough and do not have enough money, or because they have run out of money and/or the supply of cannabis and alcohol has been disrupted.

For example, the fieldworker in one community – a town in WA - reported that, in response to being asked whether individuals had replaced petrol sniffing with other substance, she was told by several informants – including police – that young people had generally gone past using petrol to get intoxicated and would prefer to use cannabis or alcohol. Younger people who cannot afford these substances, she was told, may turn from time to time to other volatile substances, typically spray paints. The implication here is that young people tend to replace petrol sniffing with cannabis and/or alcohol as part of growing older, and acquiring access to these drugs, rather than as a response to the introduction of LAF. The shift, however, may have been influenced by the decline in availability of RULP.

In another community the fieldworker noted:

> There was no strong sense that people have moved to using other drugs as a result of stopping sniffing. Cannabis use is widespread though this is thought to have its own trajectory and not be closely related to people ceasing sniffing. Rather people getting older and having their own money along with increased availability in the community are thought to be causal factors.

A corollary of this situation is that substitution sometimes takes place in the opposite direction: that is, people switch to volatile substances when they cannot access cannabis or alcohol.

> *If they can't get gunja or grog, no money left and they're a bit bored they go and cut a tin and sniff. They see if there's anything lying around – lawn mower fuel. If they can't find grog and they're stressing out. Also if they're stressed out and get into argument or fight they leave a left-over can they've hidden somewhere in the bush and go back to it. (Indigenous community member & health worker.)*

In short, while many erstwhile petrol sniffers are now using cannabis or alcohol, their drug-using careers are shaped by a mix of patterns of supply, demand and cultural norms, rather than a direct response to LAF replacing RULP.

# 8. Youth, sport and recreational services

## 8.1 Introduction

As a supply reduction strategy, the LAF program does not address demand for volatile substances or other drugs, or the factors that drive demand. These in turn are multiple and complex, and include cultural norms in the community, opportunities for engagement in non-drug using activities and the relative appeal of these opportunities, and the presence of stressors in family and community life that lead people to seek solace in drugs.

Although this evaluation did not explore these issues, it did gather qualitative data on one factor that has a potential to affect demand for volatile substances, namely youth, sport and recreation (YSR) services and programs. This was so for several reasons. Firstly, in contrast with other factors that influence demand for drugs, such as education and employment opportunities, where the impact of changes tends to occur over a long period and requires the co-existence of several pre-conditions, YSR activities represent a 'lever' available to governments and communities to offer young people immediate alternatives to recreational drug use. Secondly, a lack of YSR opportunities in communities has long been recognised as a contributing factor to VSM and other drug use by young people in Indigenous communities. Thirdly, there is widespread support in communities for reliable, regular YSR programs that can engage young people and encourage them away from substance misuse. It was for these reasons that the expansion of youth services formed an important component of the 8-Point Petrol Sniffing Strategy (PSS) formulated by the Commonwealth Government in September 2005 and subsequently endorsed by the Western Australian, South Australian and Northern Territory governments (Marcus, Shaw, d'Abbs, & Kavanagh, 2013).

An evaluation of the PSS conducted in 2012 found that, while many stakeholders spoke positively about the impact of youth services in their communities, implementation of programs had proved challenging for several reasons. These included the absence of a model of best practice, low levels of funding and a fragmentation of services across multiple government agencies (Marcus et al., 2013). A previous evaluation of the LAF rollout found that, while nine out of 41 communities included in the study appeared to have adequately resourced and implemented YSR programs and a smaller number – at the other extreme – had virtually no functioning programs – the majority of communities struggled with inadequate staff and/or facilities and/or funding (d'Abbs & Shaw, 2016).

In the present study, fieldworkers gathered qualitative information about YSR programs in the 25 communities in the sample. In this chapter, we report findings, focusing in turn on five aspects which, together, shape the nature and impact of YSR programs. These are:

- Staffing
- Funding
- Facilities
- Activities
- Engagement and participation by young people.

## 8.2 Staffing

YSR programs in communities generally require two kinds of staff: qualified youth or recreation workers, and local community-based support workers. Recruiting and retaining both sets of workers in remote communities generates difficulties, often resulting in high staff turnover and/or prolonged periods of under-staffing or no staffing at all. For example, the Barkly Regional Council (BRC) receives funding for a YSR program in one of the communities in this study. When fully staffed the program has a senior youth worker - usually not a local person - along with two or three local positions. The fieldworker who visited the community for this study was told that the program ran quite well during 2017, but the senior youth worker had since left and BRC had been unable to fill the position. In the absence of a senior worker local program staff had only run occasional activities.

Problems in recruiting and retaining YSR staff were reported in 13 communities. In some instances these difficulties were linked to housing problems. In one north Queensland community, for example, the state government had funded the Police Citizens Youth Club (PCYC) to run a recreation program, but the program had been compromised by high staff turnover and difficulties in filling local staff positions. Informants attributed the turnover to the need for the senior worker to share housing with other police. Despite an increase in funding for police and other government housing in the community, housing for this position had reportedly not been included.

In some NT communities, the incorporation several years ago of local community councils into higher level regional local government bodies had resulted not only in a loss of positions and facilities at the local level, but also a perceived loss of local control over some of the programs that were provided.

One community in Central Australia demonstrated the benefits of being able to attract and keep suitable staff. The leader of the MacYouth team administered by MacDonnell Regional Council was a local man who had been in the position for three years and had also spent seven years as a youth worker in the community. The program involved two or three full-time staff and several part-time or casual staff. The team leader also worked with at least one other, full-time, non-Aboriginal youth worker in a program that included basketball, softball, soccer, computer use and video games. For sports, they catered to any age, but young kids were not involved in the program that was funded for those from 12 to 25 years. The fieldworker reported that, while the program could benefit from additional funds, it appeared to be working well.

At the other extreme was a community in Western Australia where the fieldworker reported that there were no dedicated youth worker positions in the community and no youth centre, adding: ‘this has been the situation for many years and is a big concern’. The fieldworker was told that a visiting not-for-profit sports and recreation organisation in the Pilbara region ran school holiday and other programs in communities and also employed recreation officers in communities, but it had been unable to fill positions for workers in this community.

## 8.3 Funding

It is difficult from the reports in this study to assess the adequacy of current YSR funding levels. This is because while informants in a few communities drew attention to loss of YSR positions and the funding cuts behind them, other communities showed evidence of under-spending as a result of difficulties in recruiting and retaining staff. One specific funding issue was raised in two communities and may be an issue in other communities: namely, the lack of funds provided to cater for children aged under 12 years of age. A female

Aboriginal informant in one of these communities thought that younger children should be included in the program:

> *Some want to jump in and really want to go. They're screaming, crying and kicking because they can't go on trips. If there are that many youth workers, why don't they split and have one for six to thirteen-year-olds.*

The program took young people hunting and taught them about country, as well as running sports activities now and then when it wasn't too hot. However, as the GEC in the same community commented, the program did not provide for children under the age of twelve, and the after-school care service ended at 6pm. He said that the younger kids would then wander around, throw rocks and break in to buildings.

## 8.4 Facilities

In five communities, fieldworkers reported on the good quality of youth and recreation facilities, as in the following description:

> The facilities are very good, with a very big recreation hall in very good condition that has a kitchen and bathroom facilities. Kids have been allocated a door or two so they don't write or draw on the walls. There are basketball courts, and football, softball and soccer areas.

In other communities, one or more of three problems were found: facilities themselves were run down (three communities); they were not accessible to community members (one community), or their opening hours restricted access (four communities). In one community an existing facility had been shut down altogether. The description of facilities in one Barkly Region (NT) community illustrates the first of these problems:

> The community has an open covered basketball court, the 'Shiny Shed', a community Centre, an oval and a skate ramp. The 'Shiny Shed' has not been operational for six months. Vandals ripped out the electrics and it needs new toilets. It is scheduled for repair this year and it has four computers for internet access. The community centre is a small house without working toilets. The skate ramp is not used very much and was not used while I was there. The reason given is that no one has a working skateboard.

An example of the benefits of recreational facilities being reduced by restricted opening hours was a WA Goldfields community where the shire operated a sport and recreation program with what the fieldworker described as excellent facilities, including a swimming pool, basketball courts, a fully equipped gymnasium, sporting equipment, and pool tables. However, there were no activities on the weekends and on most evening the recreation hall had limited opening hours. In another NT community, where funds had been allocated to upgrade sporting facilities, a youth worker told the fieldworker that the facilities needed to be open for longer hours, particularly in the holidays and over summer when kids were 'daybreaking it' – staying up all night when it was hot.

## 8.5 Activities

In many communities, the local youth, sport and recreation program offered a wide range of sporting, cultural and other activities. Most of these are run by local YSR workers, but some are provided through external agencies. The description of activities in one East Kimberley community captures this diversity – while at the same time highlighting a gap:

> The program is mainly activity-based with movie nights, discos and sports focus and is funded for the 12 – 25 year old aged group but many kids under 12 participate. Bike repair workshops are run

> and then the young people participate in regular long bike rides. The community now has a youth shed and houses other activities such as art and craft, painting workshops. A submission has been lodged to fund other items such as table tennis, pool tables, play stations, a TV and DVD, fridge, freezer and washing machine for the shed and also to fix the basketball court lights, to resurface the basketball court and to make a smaller football field for the under 12 years group. The police support young men in the regional football league through mentoring, providing transport and supervision. They also run regular blue light discos. An Aboriginal NGO also visits from time to time to run sports and recreation programs. However, there have been no school holiday programs run in [the community] for at least 12 months, as a result of an organisation that used to arrange volunteers to work with children and youths in the school holidays and in after-school programs leaving the community.

In a few communities some informants reported that few activities were made available other than sports, and that this was causing dissatisfaction.

## 8.6 Engagement and participation

Probably the most important determinant of the impact of YSR programs is the extent to which they succeed in engaging with young people in the community. Even when staffing, facilities, funding and activities are all in place, there is no guarantee that the young people for whom the programs are intended will participate.

Divisions within some communities can constitute barriers. In one, the Indigenous Youth Centre manager said that ‘the service is here - the challenge is that the community doesn’t come and I don’t know how to get everyone involved’. He added that there were 21 or 22 clan groups in the community and that a youth diversion worker recently brought members of a family group that sniffed petrol to the Youth Centre. Everyone else walked out so he had to ask that they not be brought again.

At the same time, the study revealed programs that had succeeded in maintaining high levels of participation. One is a community in South Australia, where a Youth Shop had been set up, complete with a café, computer room and staff offices. The café was open from 9 till 6 and had a welcoming atmosphere with kids dropping in on their morning and afternoon breaks as well as after school, when they come to hang out, buy a milk shake, watch YouTube, play computer games and watch footy on the TV. The café was set up several years ago to generate cash to fund some of the centre’s activities in response to a push by the government for communities to become more self-reliant. The fieldworker was told that one of the reasons for the program’s success was that the manager was constantly coming up with new activities to engage young people. The most recent was the creation of a small BMX track next to the Youth Shop. Others included day trips to  nearby town for shopping, to the beach, to other communities and towns for footy games as well as longer trips. The kids were also taken camping and out bush with senior women to collect bush medicines and to hunt wombat.

This study does not pretend to be able to explain how and why engagement with young people does or does not occur in communities, beyond pointing to the need for the kinds of resources discussed in this chapter, the importance of the quality of relationships established by YSR workers with community members including young people, and factors over which governments and other external agencies may have very little control, such as inter-clan divisions or support from other community members.

## 8.7 Conclusion

In order to be both effective and sustainable, community-based youth, sport and recreation programs need to be able to recruit and retain suitable staff, have adequate funding and facilities, run a range of activities catering for both boys and girls, and engage with young people in the community. This study found that each of these requirements generates distinctive challenges. Notwithstanding these challenges, well run and resourced YSR programs represent an important complement to the LAF program, in that they help to address at least some of the factors that drive demand for volatile substances and other drugs.

# 9. Conclusions and recommendations

This study, we believe, provides evidence of both the benefits and limitations of the rollout of LAF as a strategy for preventing petrol sniffing in communities. The main benefit is the contribution of LAF to reducing petrol sniffing – or maintaining current low levels of petrol sniffing – in many though not all communities. The levels recorded in this report follow earlier declines in petrol sniffing prevalence, also brought about largely through the introduction of LAF. This means that, while petrol sniffing has not disappeared, it is nowhere near the levels that existed prior to the introduction of LAF.

The benefits of a decline in petrol sniffing prevalence flow on into other domains, chiefly in reduced social disruption and less harm to sniffers themselves. However, while the changes that have come about in communities as a result of LAF are in most cases now well entrenched in those communities, they are not irreversible. In the judgement of many informants old enough to remember what things were like before LAF became available, any reduction in availability of LAF could easily lead to a revival of petrol sniffing and all of the harms entailed. Moreover, in communities where petrol sniffing levels were high prior to the introduction of LAF, long-term legacies of those days remain, such as former sniffers with permanent disabilities and inter-generational trauma in families where today's adults were themselves victims of VSM in their families.

The finding that LAF continues to contribute to a decline in petrol sniffing, which builds on evidence gathered in earlier studies (d'Abbs & Shaw, 2016; d'Abbs et al., 2017) also demonstrates that the benefits of the LAF program are *sustainable*. These findings, together with the likelihood that these benefits might well be reversed in the absence of LAF, lead us to conclude that continuation of the LAF program is vital to enhancing the health and wellbeing of young people in Indigenous communities with a history of petrol sniffing.

Turning to evidence of limitations inherent in the LAF program, it is, firstly, apparent that availability of LAF in a community does not, in itself, mean that RULP ceases to be available. This study suggests that the impact of LAF in a community depends largely on the extent to which it supplants RULP, and in all but the most isolated communities this in turn depends on whether or not LAF replaces RULP at a regional rather than a community level. Eliminating RULP is a difficult challenge under the best conditions, given the movement of vehicles in and out of communities, but it is certainly not possible if outlets located within about 300 km of a community stock RULP. The example of Community A, quoted earlier in section 4.3.1, demonstrates the benefits that flow from expanding the presence of LAF from a community to a region-wide level. (In this case the expansion was in part brought about by the government's use of mandating powers under the *Low Aromatic Fuel Act*.)

Secondly, replacement of RULP with LAF does not in itself reduce demand for volatile substances or other drugs. This study shows that young people who, for whatever reason, want to sniff inhalants, are periodically able to access a range of products, in many cases despite concerted efforts by communities to make products such as deodorants, spray paints and glues inaccessible. It also shows that some young people are sniffing LAF, despite its non-intoxicating properties. The implications at present are poorly understood. No-one with whom we spoke in communities where LAF is being sniffed professed to have a clear idea of how, why or with what consequences the practice is occurring. Some informants have suggested that it may amount to little more than children imitating the drug-using practices of their older peers.

Even if this is the case, there are grounds for concern, as it may be linked to a rise in the number of very young children sniffing inhalants. As noted earlier in this report, the number of very young children (aged five - nine years) sniffing petrol in the 22 communities where comparison is possible, although small, rose from six to nine between 2013-14 and 2018. Unpublished data based on referrals in the Top End of the NT under the *NT Volatile Substance Abuse Prevention Act* point to a rise in referrals of children aged 12 years or under from 2017.

Petrol sniffing or other forms of VSM by children of this age is disturbing on at least four counts: firstly, because of the possibility of the children sustaining long-term damage; secondly, because it may be a marker of underlying mental health problems. In one community, a man in his fifties contrasted his own experience of sniffing petrol as a young man in the community – an activity he looks back on as a kind of foolish fun – with sniffing by some young people today, which he sees as an expression of family and personal problems. Families today, he continued, urgently needed support. A member of a local health program team in one community described young people posting messages on Facebook that they would not express face-to-face with others, such as 'I want to die; I hope I die young'. Petrol sniffing, she went on to argue, was about social exclusion in settings of inter-generational trauma, chronic overcrowding, and lack of food security.

Thirdly, anecdotal reports of episodes of petrol sniffing as a group activity suggest that it is sometimes associated with heightened sexual activity, thereby exposing young children to a high risk of sexually transmitted infections. Finally, petrol sniffing or other drug use among children of this age poses challenges for devising appropriate prevention and treatment measures. Treatment programs tailored for adolescents, for example, may be unsuitable for younger children.

In some communities, informants stated that the impact of contextual factors such as overcrowding had periodically been aggravated by financial difficulties resulting from young people being breached by and/or disengaging from the Community Development Program (CDP).

The interactive effects of several of these factors, and one community's response, are apparent in a fieldworker's report from one community in the APY Lands about an outbreak of petrol sniffing that occurred in 2016.

> A visiting teenager from another community encouraged some younger people to try sniffing LAF. Over the next three weeks, intermittent sniffing occurred involving approximately 16 people, mostly males aged from 7 -16 years with the main cohort being in the 10 – 14 year age group. Some sniffed LAF and others unleaded petrol obtained from motor-bikes.
>
> The response of community members was initially one of fear. The fieldworker was told that people felt stressed and scared at the time as some parents were ex-sniffers themselves and feared a return to the 'bad old days'. An initial response from some parents was to physically assault their children as they said they were scared and wanted to send a strong message to their child.
>
> A community meeting was held to talk about what people could do to stop the sniffing. About 50 people attended and they were supported by the police and the local Child and Adolescent Mental Health Service (CAMHS). Initially people blamed others in the meeting. Later, some community

leaders began talking about the trauma that the kids were experiencing in their lives, and suggested that rather than blaming people the young people 'need to be shown love in their lives'. This then became the basis for a community-wide response.

Separate family meetings facilitated by CAMHS resulted in a series of bush trips for the young boys. They were initiated by some senior men who wanted to show their concern for the kids and emphasise the importance of kin relationships. They were supported by a number of service providers. A key 'culture walk' event was held involving lots of community members and staff. Educational activities for the older boys were held to try and get them to understand the damage and harm caused from sniffing inhalants.

Community members are proud of the way they responded and look back on this and say they stopped the sniffing. Professional staff involved reported that they spent some time talking to the children to find out the reasons for the sniffing. The children told them they did it mainly because of peer pressure and curiosity. They said it took their feelings of hunger away, helped them to sleep, stopped them feeling sad and gave them sensations of spinning out. Staff also stated that the 2016 outbreak coincided with many families struggling with Centrelink breaches to people on CDP. This put a lot of pressure with people being breached for up to eight weeks and receiving no income support People stated that the reduction of disposable cash options as a result of CDP restrictions resulted in a lot of pressure being put on family members, particularly older members who received pensions that were not quarantined. The NPY Women's Council youth team reported that approximately 50% of people they worked with did not receive any income.

These events took place in 2016. Since then, the CDP program has been subjected to a Senate inquiry that criticised many aspects of the program (Commonwealth of Australia, 2017), a formal Government response that accepted some of the inquiry recommendations but rejected others (Commonwealth of Australia, 2018), and further reforms to the program scheduled to take effect from March 2019 (Commonwealth of Australia, 2019). In light of these events, we cannot assess the degree to which problems reported to us in this study are continuing to occur. We do, however, note that informants in several communities stated that difficulties associated with CDP were associated both with financial problems in families and disengagement by some young people from community activities.

These and other drivers of demand for inhalants and other drugs need to be addressed if the benefits of the LAF rollout as a supply reduction measure are to be fully realised. Neither can be effective without the other.

## 9.1 Recommendations

In light of our conclusions, we make the following recommendations[9].

1. We recommend that the Australian Government continue to support and resource the rollout of LAF, on the grounds that:
   - the LAF program has been shown to be effective in reducing petrol sniffing in Indigenous communities and has thereby reduced the harms to the health and wellbeing of Indigenous people, especially youths, that flow from petrol sniffing;

[9] In addition to the five recommendations listed below, the report prepared for the Department of the Prime Minister & Cabinet contains a sixth recommendation that refers to services in specific communities. The sixth recommendation has been omitted from this version in order to protect the anonymity of participating communities.

- the program has been shown to enjoy widespread community support, and
- should the program *not* be continued, it is likely that the high levels of petrol sniffing and associated harms present in some communities prior to the rollout of LAF would return.

2. We recommend that, in communities where the potential benefits of LAF are undermined by continuing accessibility of RULP outside the community, the Australian Government make further efforts to reduce its accessibility at a regional level. These efforts should include consideration of using the Low Aromatic Fuel Act 2013 to declare low aromatic fuel areas.

3. We recommend that, in light of the continuing need in communities for adequately resourced youth, sport and recreation (YSR) programs that engage young people, national, state and territory governments commit to resourcing programs, paying particular attention to:
   - challenges in recruiting and retaining staff;
   - funding activities and services;
   - providing appropriate facilities, and
   - meeting the needs of children aged under 12 years, who are sometimes excluded from current programs.
4. We recommend that, in light of evidence of continuing VSM – including possibly inhalation of LAF – by young children (aged less than 12 years) in some communities, the Australian Government cooperate with state and territory governments in supporting Indigenous communities and organisations to develop evidence-based, culturally appropriate options for prevention and treatment. In doing so, governments should recognise that:
   - VSM by children is often part of a pattern of opportunistic, multiple-drug use shaped by availability of substances;
   - in many communities, cannabis is much more widely used by young people and regarded as a more urgent problem than VSM;
   - amongst older youths, alcohol is also widely consumed in some communities and seen by many community members as a major problem.

5. We recommend that the Australian Government, in cooperation with petrol manufacturers and other stakeholders as appropriate, prepare and disseminate educational resources to address three issues that currently threaten to undermine the impact of LAF:
   - continuing concerns among some people about perceived harmful effects of LAF on small engines such as outboard motors and lawn-mowers;
   - lack of knowledge and in some cases erroneous beliefs about differences in colour between LAF, RULP and PULP, arising partly from recent changes in addition of dyes to various kinds of petrol);
   - lack of awareness among some visitors to communities stocking LAF – including contractors and tourists – about the nature and purpose of the LAF program, and their obligations with respect to importation and use of RULP and other volatile substances.

Finally, we draw attention to other factors which, directly or indirectly, are likely to influence drug use including VSM among young people in Indigenous communities. These include the presence of inter-generational trauma in many families, chronic overcrowding, lack of food security in many households, financial difficulties, and lack of employment opportunities. We do not make recommendations about these because their effects are not specific to VSA, and they require attention in their own right, not because they might lead to VSA.

Addressing the factors that drive demand for volatile substances and other drugs among young Indigenous people will enable the full benefits of what is already a highly successful VSM supply reduction program to be realised, thereby making a significant contribution to Indigenous health and wellbeing.

# 10. Appendix A: Data collection instruments

***Note: spaces for responses have been removed or reduced in this version.***

## Interview Guide for all respondents

### Introduction

*Prior to collecting data, you should have introduced yourself to appropriate people in the community and explained the purpose of the visit. You should also identify three 'proxy respondents' in the community, at least some of whom would normally be Aboriginal Health Workers. These are the people, referred to as Proxy Respondents in this Guide, from whom you will seek information about numbers of people currently sniffing petrol, and their patterns of use. You should also interview other knowledgeable people in the community, referred to as Key Informants in this Guide, including senior members of the community and service providers*

*This Interview Guide should be used for both proxy respondents and other key informants, according to the following sequence:*

- *Part A: Petrol sniffing frequencies and patterns: Proxy Respondents only; do not ask other informants questions from this section;*
- *Part B: Use of inhalants (other than petrol): All respondents;*
- *Part C: Use of other substances: All respondents;*
- *Part D: Acceptability and impact of LAF: Key informants only (do not ask Proxy Respondents, unless they raise these issues, in which case, feel free to ask these questions with them);*
- *Part E: Services and opportunities for young people: Key informants only (do not ask Proxy Respondents, unless they raise these issues, in which case, feel free to ask explore these questions with them);*
- *Part F: Services for dealing with alcohol and other drug problems in community: Key informants only.*

*In other words:*

*Proxy Respondents: ask Parts A-C;*
*Key Informants: ask Parts B-F.*

*Please remember to give each informant an Information Sheet and obtain a signed Consent form before commencing interviews.*

**Interviewer's name: ……..**

**Date of interview: …… Place of interview: ……..**
\
**Proxy respondent's/Key informant's name: ……**

**Position …… Community: ……**

**Length of time resident in community (approximate – for non-community members): ….**

## A: Petrol sniffing (Proxy respondents only)

*The procedure for collecting data on petrol sniffing is the same as that used in the 2011-2014 study. That is, you should invite informants to think, in turn, of six age/gender categories. These are:*

- *Primary school aged girls*
- *Primary school aged boys*
- *Young women - high school, too young to go to pub*
- *Young fellas – high school, too young to go to pub*
- *Older women (up to 40 years of age) – people who can buy grog*
- *Older men (up to 40 years of age) – people who can buy grog.*

*Begin by asking: "Can you think of any little girls – primary school kids – who sniff?" If a person is identified, use the tables in Attachment 1 on the last page of this Interview Guide to record temporarily their first names and/or initials as a means of checking whether the same person is nominated by other proxy respondents.*

*For each person, ask the informant to describe the person's pattern of sniffing, using the categories 'occasional', 'regular' or 'heavy', as defined in Table A.1 below. (These are the same categories that have been used in previous studies of the LAF rollout.)*
*You should also record the person's gender and age.*

*Repeat this process for each of the six age/gender categories above.*

**Table A.1: Definitions of petrol sniffing frequency categories**

| Category | | Definition |
|---|---|---|
| Non-sniffer | | Not known to have sniffed petrol or any other inhalant in past 6 months. |
| Current sniffer – | Experimental / occasional | Believed to have sniffed petrol or other inhalant in past 6 months, but no evidence of regular use. |
| | Current sniffer – Regular | Believed to have sniffed petrol or other inhalant regularly over past 6 months, but does not meet criterion of heavy use (i.e. at least once a week). |
| | Current sniffer – Heavy | Has sniffed petrol or other inhalants at least weekly (whenever inhalants are available), over past 6 months. |

*The data that you collect using this procedure is the raw data that you will later use to aggregate the numbers of people currently sniffing petrol in the age/gender/frequency groups set out in Tables A.2 to A.5 below. Once you have done this, you should return Attachment 1 to the Health Centre, or destroy it.*

## B: Inhalant use (all respondents)

With Proxy Respondents, you should lead into the next section by saying something like 'Now I'd like to ask you a few questions about other drugs, beginning with other volatile substances.'

## B.1: Petrol-related substances

*Hand CARD 1 to respondent. If you have reason to doubt the literacy of the respondent, read out each substance, otherwise leave the respondent to read for themselves.***)**

***Note:** because Proxy Respondents have already answered more detailed questions about RULP, they should NOT be asked about it again here, but should be invited to comment on the other substances listed.*

**CARD 1: PETROL**

**REGULAR UNLEADED PETROL***
**PREMIUM UNLEADED PETROL**
**AVIATION FUEL**
**LOW AROMATIC FUEL**
**LOW AROMATIC FUEL WITH ADDITIVES (EG POLYSTYRENE)****
***Do not ask Proxy Respondents about RULP.***
***Note: no known additives actually make LAF intoxicating.***

**B.1.1: To your knowledge, are any of these forms of fuel being used in the community as recreational drugs?**

*For each substance named, ask the following two questions, and mark appropriate boxes in Table B.1 below:*
**B.1.2: Is it (or name the substance) used in the community just occasionally, or regularly?**

**B.1.3: In your opinion, is it (or name the substance) a serious problem in the community?**

***If clarification of these terms is needed, share the following definitions with the respondent:***
***Occasional use****:* Intermittent use, but respondent not aware of regular use.
***Regular use****:* Present in the community and used most weeks.
***Serious problem****:* This relies on the subjective assessment of the respondent, but if the respondent is in any doubt, you should suggest that a problem should be defined as serious if the respondent believes it is causing significant harm in the community AND/OR members of the community are having difficulty in controlling or managing the substance concerned

**Table B.1: Reported use of petrol-related substances as recreational drugs**

| Substance | No use | Occasional use | Regular use | Serious problem Y/N | Comments |
|---|---|---|---|---|---|
| **Petrol – RULP** | | | | | |
| **Petrol -Premium ULP** | | | | | |
| **Aviation fuel** | | | | | |
| **Low Aromatic Fuel (LAF)** | | | | | |
| **Petrol – LAF with additives (eg polystyrene)** | | | | | |

## B.2: Other inhalants

*Hand CARD 2 to the respondent, and follow the same procedure as for CARD 1.* ***There is no need to read out the list of substances, unless you think that the respondent needs assistance.)***

**CARD 2: OTHER INHALANTS**
**AERSOLS**
**BUTANE/LIGHTER FLUID**
**COOKING GAS**
**DEODORANTS**
**FLY SPRAY**
**GLUE**
**HAIR SPRAY**
**NAIL POLISH**
**PAINT THINNERS**
**SOLVENTS UNSPECIFIED**
**SPRAY PAINT**
**WHITE OUT**
**OTHER INHALANTS (NAME)**

**B.2.1: To your knowledge, are any of the substances on this list being used in the community as recreational drugs?**

*The following two questions should be asked for all substances named by the respondent, and answers recorded in Table B.2 below.*

**B.2.2: Is it (or name the substance) used in the community just occasionally, or regularly?**
**B.2.3: In your opinion, is it (or name the substance) a serious problem in the community?**

**Table B>2: Reported use of other inhalants as recreational drugs**

| Substance | No use | Occasional use | Regular use | Serious problem Y/N | Comments |
|---|---|---|---|---|---|
| Aerosols | | | | | |
| Butane/lighter fluid | | | | | |
| Cooking gas | | | | | |
| Deodorants | | | | | |
| Fly spray | | | | | |
| Glue | | | | | |
| Hair spray | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Nail polish | | | | | |
| Paint thinners | | | | | |
| Solvents n.e.c. | | | | | |
| Spray paint | | | | | |
| Whiteout | | | | | |
| Other inhalants 1 …… | | | | | |
| Other inhalants 2 …… | | | | | |

## C: Other substances

*While this study focuses on petrol sniffing, we have also been asked to gather intelligence on alcohol and other drug use in the community. Once data on petrol sniffing and other inhalants has been collected, you should change the topic to other drugs by saying something like 'Now I'd like to ask you a few questions about grog and other drugs in the community,' and proceed to ask the questions below.*

## C.1: Grog/alcohol/liquor

**Table C.1.1: How many people in this community regularly drink grog? Let's start with the men.** *(Tick one answer only)*

| | |
|---|---|
| None, or very few | |
| Some, but less than half | |
| More than half | |
| Everyone, or almost everyone. | |

**Table C.1.2: And the women?**
*(Tick one answer only)*

| | |
|---|---|
| None, or very few | |
| Some, but less than half | |
| More than half | |
| Everyone, or almost everyone. | |

**Table C.1.3: How often do fights linked with grog happen in this community?** *(Tick one answer only)*

| | |
|---|---|
| Never | |
| Sometimes, but not all the time | |
| Virtually every week | |

**Table C.1.4: Is home-brewed grog drunk in this community?** *(Tick one answer only)*

| | |
|---|---|
| Never | |
| Occasionally | |
| Regularly/frequently | |

**Table C.1.5: Compared with a year ago, do you think that grog problems in the community have:** *(Tick one answer only)*

| | |
|---|---|
| Got better | |
| Stayed the same, or | |
| Got worse. | |

## C.2: Gunja (Cannabis)

**Table C.2.1: How many people in this community regularly use gunja (marijuana/cannabis)? Let's start with the men and boys.** *(Tick one answer only)*

| | |
|---|---|
| None, or very few | |
| Some, but less than half | |
| More than half | |
| Everyone, or almost everyone. | |

**Table C.2.2: And the women and girls?** *(Tick one answer only)*

| | |
|---|---|
| None, or very few | |
| Some, but less than half | |
| More than half | |
| Everyone, or almost everyone. | |

**Table C.2.3: How often do fights or humbugging linked with gunja happen in this community?** *(Tick one answer only)*

| | |
|---|---|
| Never | |
| Sometimes, but not all the time | |
| Virtually every week | |

**Table C.2.4: Compared with a year ago, do you think that gunja problems in the community have:** *(Tick one answer only)*

| | |
|---|---|
| Got better | |
| Stayed the same, or | |
| Got worse. | |

## C.3: 'Ice' (Crystal methamphetamine)

*Note: Despite publicity, not everyone knows what 'ice' is, and some people may lump other recreational drugs such as ecstasy in with it and call it all 'ice'. For this reason, try to sound out the informant's*

*understanding, and if you have reason to believe that s/he doesn't have much idea what 'ice' is, don't ask the questions about it.*

**You've probably heard something in the media about 'ice', or crystal methamphetamine.**

**Table C.3.1: Do you know how many people in this community use 'ice' (or crystal methamphetamine)? Let's start with the men and boys:** *(Tick one answer only)*

| | |
|---|---|
| None, or very few | |
| Some, but less than half | |
| More than half | |
| Everyone, or almost everyone. | |

**Table C.3.2: And the women and girls?** *(Tick one answer only)*

| | |
|---|---|
| None, or very few | |
| Some, but less than half | |
| More than half | |
| Everyone, or almost everyone. | |

**Table C.3.3: How often do fights or other problems linked to Ice happen in this community?** *(Tick one answer only)*

| | |
|---|---|
| Never | |
| Sometimes, but not all the time | |
| Virtually every week | |

**Table C.3.4: Compared with a year ago, do you think that problems associated with Ice in the community have:** *(Tick one answer only)*

| | |
|---|---|
| Got better | |
| Stayed the same, or | |
| Got worse. | |

## C.4: Other substances (Please name:…….)

***Are you aware of any other recreational drugs that are being used in this community and, if so, would you mind telling us about these too?***

**Table C.4.1: How many people in this community regularly use …… ? Let's start with men and boys.** *(Tick one answer only)*

| | |
|---|---|
| None, or very few | |
| Some, but less than half | |
| More than half | |
| Everyone, or almost everyone. | |

**Table C.4.2: And the women and girls?** *(Tick one answer only)*

| | |
|---|---|
| None, or very few | |
| Some, but less than half | |
| More than half | |
| Everyone, or almost everyone. | |

**Table C.4.3: How often do fights or humbugging linked with …….. happen in this community?** *(Tick one answer only)*

| | |
|---|---|
| Never | |
| Sometimes, but not all the time | |
| Virtually every week | |

**Table C.4.4: Compared with a year ago, do you think that ……. problems in the community have:** *(Tick one answer only)*

| | |
|---|---|
| Got better | |
| Stayed the same, or | |
| Got worse. | |

***This marks the end of the interview for Proxy Respondents. Please wrap by the interview with them by thanking them, and inviting to add any additional comments or thoughts that they might wish to share with you.***

……
……
……..

***Don't forget to aggregate the petrol sniffing data and complete Tables A.2 to A.5 below. This can be done away from the interview site.***

## D: Presence, awareness, acceptability and impact of LAF (Key Informants only; do not ask Proxy Respondents, unless they appear to be interested in these issues)

*Since this marks a change of topic, you should say something like 'Now I'd like to ask you a few questions about Low Aromatic Fuel in the community.*

***Note**: In communities that do NOT have access to LAF, skip this section and go straight to Part E.*

**D.1:Do you personally think that Low Aromatic Fuel has been beneficial in the community?** *(Probe, asking respondent to elaborate, giving reasons for her/his assessment of LAF.)*

**D.2: Putting your own views aside for a moment, do you think that Low Aromatic Fuel is generally accepted in the community or not?** *(Again, ask respondent to elaborate on her/his assessment.)*

***D.3:** (If the respondent has already told you about what s/he sees as negative aspects of LAF, do not ask the following question.)* **Do you see any 'down side' with Low Aromatic Fuel?**

*If the respondent mentions any negative aspects, please probe and try to find out the basis for the respondent's beliefs.*

***D.4:** (Ask only if the respondent hasn't already talked about substitution of other substances for petrol)* **Have you come across any evidence to suggest that people are replacing petrol-sniffing with other drugs?** *(If yes, probe to identify substances involved.)*

**D.5: To your knowledge, is regular unleaded petrol still finding its way into the community?** *(Probe to find out sources, suppliers, and patterns of supply.)*

**D.6: If so, do you have any ideas on how this can be prevented?** *(Probe.)*

**D.7: Apart from Low Aromatic Fuel, what else do you think is needed in this community to prevent or manage petrol sniffing and other drug use?** *(Probe.)*

## E: Services and opportunities for young people (Key Informants only)

**Now I'd like to ask a few questions about opportunities for young people in this community.**

**E.1: Firstly, what are the main employment opportunities for young people here?** *(Ask respondent to describe. NOTE: Respondent may or may not choose to mention CDP. If they do, fine; if not, don't raise it)*

**E.2: What do you see as the main barriers to young people finding work?**

**E.3:** *(The respondent may already have described the situation regarding training opportunities, in which case don't ask the following question.)* **What are the main training programs and activities in the community?** *(In probing, ask about the suitability and adequacy of these programs.)*

**E.4: Does this community have a youth worker or recreation worker?** *(If 'yes', ask respondent to describe the position, then lead into next question.)*

**E.5:: Can you tell me about the recreation programs and facilities in the community?**

**E.6: How would you rate the adequacy of these programs and facilities?**

## F: Services for alcohol and other drug problems in the community (Key Informants only)

**Finally, I'd like to ask you a few questions about services available for people with petrol sniffing or other drug problems.**

**F.1: Do you know if there is either a resident or a visiting service for helping people with petrol sniffing or other drug problems, or places outside the community where people with petrol sniffing or other drug problems can go for help?** *(If respondent is not sure, do not probe further. If respondent says there is such a service, ask her or him to describe it.)*

## Concluding the interview

Thank the respondent for her/his time and thoughts and, in doing so, invite her/him to make any additional comments that the respondent may wish to add.

## Compiling the petrol sniffing tables

*Aggregating the raw data on petrol sniffing into tables 5.1 to 5.4 can be done away from the interview site. Follow these guidelines: if two or more informants identify a person as currently sniffing petrol, then that identification is considered reliable. If only one informant identifies someone, but that informant is considered to be in an extremely good position to know – for example through family links – then that identification is also considered reliable. If these conditions are not met, the identification is not considered reliable.*

*Aggregate the numbers in each age-group x gender x frequency category, and enter the numbers into Tables 5.1 to 5.4 below.*

*Please do not retain any names or other information that could be used to identify individuals described as sniffing petrol in your records.*

**Table 5.1: Number of non-sniffers aged 5-39 years**

| Age | 5-9 | 10-14 | 15-24 | 25-39 | Total |
|---|---|---|---|---|---|
| Male | | | | | |
| Female | | | | | |
| Total | | | | | |

**Table 5.2: Number of occasional sniffers aged 5-39 years**

| Age | 5-9 | 10-14 | 15-24 | 25-39 | Total |
|---|---|---|---|---|---|
| Male | | | | | |
| Female | | | | | |
| Total | | | | | |

**Table 5.3: Number of regular sniffers aged 5-39 years**

| Age | 5-9 | 10-14 | 15-24 | 25-39 | Total |
|---|---|---|---|---|---|
| Male | | | | | |
| Female | | | | | |
| Total | | | | | |

**Table 5.4: Number of heavy sniffers aged 5-39 years**

| Age | 5-9 | 10-14 | 15-24 | 25-39 | Total |
|---|---|---|---|---|---|
| Male | | | | | |
| Female | | | | | |
| Total | | | | | |

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