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# Fanning the flame: analysing the emergence, implications, and challenges of Australia's de facto war on Nicotine



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# Abstract

This commentary examines Australia's intensified regulatory approach toward nicotine control, revealing a shift that increasingly resembles a de facto War on Nicotine. While traditional tobacco control measures have achieved commendable declines in smoking rates, recent policies– including increased tobacco taxation and a ban on consumer vapes– have inadvertently fuelled a burgeoning nicotine black market. This has resulted in serious unintended consequences, including increased criminal activity, systemic violence, and health risks associated with the proliferation of unregulated nicotine products. By analysing the relationship between nicotine control policies and these outcomes, this paper argues that Australia's current strategy may be creating more harm than it mitigates, mirroring many of the unintended consequences historically associated with drug prohibition. We contend that a recalibration toward a harm reduction model, coupled with a re-evaluation of tax and improved access to less harmful nicotine products, could achieve a more balanced approach to nicotine control, aligning public health objectives with sustainable, effective policy.

Keywords War on drugs, War on Nicotine, Tobacco tax, Vaping, Black market

# Background

Australia has entered unchartered territory in tobacco control. From 2019 to 2023, Australia saw its steepest decline in smoking rates in the past 30 years, with daily smoking among adults decreasing from 11.6 to 8.8% [1, 2]. After decades of leading the world in implementing tobacco control policies, the nation appears on track to meet its target of less than 5% prevalence in adult daily smoking by 2030 [3]. However, this period has also seen a substantial growth in the black market for tobacco as well

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as nicotine vaping products (vapes) [4], to the extent that nicotine now constitutes the second largest illicit drug market in the country in terms of the number of consumers [2]. Unsurprisingly, the emergence of a black market of this size has been accompanied by serious and escalating levels of criminal activity. Competition amongst rival criminal groups for control of the nicotine black market has resulted in what news media have dubbed the 'tobacco wars.' This has involved over 200 arson attacks targeting premises linked to the sale of illicit nicotine products since the beginning of 2023 until January 2025 [5, 6]. Systemic violence has also extended beyond arson to include a growing number of homicides, kidnappings, assaults, robberies, and instances of extortion targeting both black market operators and legitimate retailers [6-8].

In response, both state and federal governments have further increased their focus on law enforcement in an effort to 'ramp up the fight against black market nicotine products' [9]. This has involved substantially boosting funding for enforcement agencies and stiffening penalties for commercial illicit nicotine supply and retailing [10– 12]. We contend that this growing (over)reliance on law enforcement within Australian tobacco control increasingly resembles a War on Drugs, effectively amounting to a de facto War on Nicotine. While distinct from other drug wars in some important respects, for example the current absence of criminalisation of tobacco consumers and widespread availability of tobacco through legal channels, there are a number of fundamental material and rhetorical parallels between Australia's emerging War on Nicotine and the broader War on Drugs.

As is the case with the War on Drugs, Australia's War on Nicotine is characterised by disproportionate funding for and emphasis on illicit supply reduction over demand and harm reduction. Recently introduced supply reduction measures include \$295.5 million in federal funding for the Australian Border Force (ABF) to facilitate national inter-agency coordination to combat the trafficking and sale of illicit nicotine products [13, 14], as well as increased penalties for the commercial distribution of vapes [15]. Government press releases touting successful seizures of illicit nicotine products, replete with estimated 'street values' and claims regarding their supposed impact on the black market [9, 16, 17], will be familiar to those acquainted with previous War on Drugs messaging. So too will the recurrent framing of illicit nicotine suppliers as explicitly targeting 'kids' with the aim of recruiting 'a new generation to nicotine addiction' [17–19], and the stigmatising and dehumanising characterisation of people who consume these products as 'nicotine addicted smokers and vapers' [20].

The intensification of supply-side enforcement has been accompanied by a smaller increase in funding for demand reduction in the form of education and awareness campaigns aimed at changing public perceptions of vaping, particularly among young people [21]. These demand reduction strategies also resemble those witnessed in previous eras of the War on Drugs, whether in conveying the importance of abstinence (see Fig. 1), or emphasising the purportedly inevitable harms associated with vaping, claiming that 'every vape is a hit to your health' and noting the presence of noxious chemicals, including 'weed killer', 'bug spray', formaldhyde, etc [22, 23].

As with Australia's broader War on Drugs, there is little evidence to suggest that our de facto War on Nicotine is an optimal strategy for reducing nicotine-related harms. Critically, the increasing restrictions on tobacco substitutes is antithetical to the principles of harm



# Picture 1. NSW Government, 2024



# Picture 2. US Department of Health

# and Human Services, 198-?

Fig. 1 Say no. Left: A 2024 anti-vaping health promotion graphic (Central Coast Health Promotion Service). Right: A 1980s anti-cannibis poster (US Department of Health and Human Services)

reduction– an approach which has grown to prominence in response to the failures of the War on Drugs and has been a pillar of Australia's National Drug Strategy since 1985 [24]. Improved availability of less-harmful forms of nicotine have long been advocated for by harm reduction proponents [12, 25] and some tobacco control experts [26, 27], and existing restrictions on such products have been decried as 'perverse' [11].

We share a similar view and will make the case that Australia's current approach to nicotine control has facilitated the very conditions that have enabled the black market to thrive, thereby creating new social and economic harms in addition to its suboptimal effectiveness in reducing harms from tobacco alone. To this end, this commentary will first discuss the broader drivers of black markets. We will then analyse how the central elements of Australia's nicotine control strategy- namely steep tobacco taxes and the ban on consumer vaping products- conflict with efforts to dismantle the black market and reduce tobacco-related harms. Next the commentary will explore the criminal and public health implications of current policies and the associated social and economic costs, before discussing the political context in which arguments in favour of harm reduction have previously been dismissed. We will then conclude with key insights and recommendations.

## Discussion

## What drives a black market?

Black or illicit markets emerge when there is a mismatch between the demand and the legal supply of a particular good or service [28]. While outright prohibition is a common factor in many illicit drug markets (e.g., those for heroin or methamphetamine), black market supply may also persist despite the availability of legal supply. For example, in Australia, the largest illicit drug market is cannabis which continues to thrive despite the introduction of a medicinal pathway in 2016 [2]. Perhaps more surprisingly, while significantly diminished in size, the black market for cannabis in Canada has also persisted despite the introduction of country-wide legalisation in 2018 [29].

Key drivers of black market demand include improved convenience and availability, lower costs, higher perceived quality, and a wider diversity of products [30–33]. Social and cultural factors can also play an important role. Loyalty to particular suppliers, the influence of social networks, and the perceived stigma associated with purchasing legally have been shown to drive consumers towards black markets [30, 33]. For some drugs in some communities, buying from black markets is normalised and even seen as a preferable option, especially when legal purchasing is accompanied by perceptions of judgement on the part of others [33, 34]. Additionally, legal constraints such as limits on purchase quantities, stringent identification requirements, and health warnings can further alienate consumers from legal markets, thereby stimulating demand for illicit alternatives [30, 31].

Supply is the other critical component in the formation of black markets. First and foremost, the prospect of financial gain encourages people to enter into black market supply. This gain comes from fulfilling unmet demand in the legal market and through evasion of overheads such as taxes imposed on legal products. The specific financial motivations of a participant in the black market may differ depending upon their position in the illicit supply chain. For black market suppliers involved in international trafficking, wholesaling, and high-level distribution, the prospect of acquiring significant wealth and a lavish lifestyle, coupled with low levels of perceived risk, appear to be major motivations [35]. For those involved in lower-level retailing, financial incentives are often much more modest. Low-level retailers may be encouraged to work in illicit supply chains due to unemployment or poverty, or a lack of access to legitimate job opportunities [36]. Notably, people are more likely to be drawn into low-level black market supply during periods of broader economic stress, such as recessions or cost of living crises [37].

#### Taxation of tobacco products

Tobacco has been subject to customs and excise duties in Australia for over 200 years, providing a major source of government revenue throughout that time as an administratively efficient indirect tax on consumption [38]. However, major tax increases in recent decades have been justified with the additional aim of improving population health by disincentivising smoking [39]. Taxes were first increased for this purpose in the 1990s, but considerable expansion through large rate increases only occurred from 2010 until 2020 over multiple policy changes. This included a 25% increase in 2010, annual 12.5% increases from 2013 to 2020, adjustment for inflation, and alignment of tax rates between factory-made cigarettes and roll-your-own tobacco. Compounded over this period, the tax rate per cigarette increased by over 300% with the price of a popular brand increasing from \$12.95 to \$48.70 for a pack of 25 cigarettes [40]. After three years with no change in the tobacco tax, further annual 5% increases were introduced from 2023 to 2025 [41].

As a public health policy, increasing tobacco taxes has been widely popular, at least amongst the increasing proportion of the population who do not smoke [2]. The implementation of tobacco taxes for the purpose of reducing smoking has been supported by evidence of price elasticity, and strategies agreed in the World Health Organisation's (WHO) Framework Convention on Tobacco Control (FCTC), stating that tobacco taxation is the 'single most effective' policy in reducing smoking prevalence [42].

Considering the widespread availability of legal tobacco in Australia, recent tax increases are likely the major driver for both the demand and supply of illicit products. From the demand side, high prices resulting from taxation provide an incentive for consumers to seek cheaper products. From the supply side, by avoiding tax imposts, sellers can sell cheaper products than are legally available, enabling them to grow or maintain their market share whilst still maintaining a profit. Indeed, the large increases in tobacco taxation over the previous decade has been accompanied by substantial growth in the supply and use of illicit tobacco products, with the Australian Tax Office estimating that, as a proportion of the total of the tobacco market, the illicit market increased from 4.9% in 2014-15 to 14.3% in 2022-23 [43].

In its manual for implementing tobacco tax policy, the WHO recognises that 'an increase in tobacco excises may create an incentive to engage in tax avoidance and tax evasion activities by both manufacturers and individuals' [42] and that 'high tax increases may provide financial incentives for smuggling' [42]. The WHO also acknowledges that the increase in demand for cheaper substitutes is a direct result of increases in price. Relatedly, the Australian Government's National Preventative Health Strategy- The Roadmap for Action [44] explicitly groups tax increases and strategies to combat the illicit trade in Key Action Area 1: Make Tobacco Products More Expensive. As such, both the WHO and the Australian Government have at times acknowledged the role of the tax increases in incentivising the black market, and the potential impacts of the black market in undermining the tax policy itself- both in terms of revenue generation and disincentivising smoking.

It is worth noting that, despite persistent claims of the effectiveness of tax increases in reducing smoking prevalence, to our knowledge, this has not been demonstrated in the published literature in the Australian context and no official evaluation has been published since 2010. One study which attempted to assess the effect of two of the tax increases found a small temporary reduction in prevalence with no ongoing change in the trend [45]. As discussed in a Correspondence with the journal's editor, one author of this commentary notes that this reported effect was sensitive to modelling decisions and the effectiveness of tax increases was not shown to be conclusive [46]. As such, the benefit of the tax increases on smoking prevalence, prior to the emergence of the black market, remains unknown along with the socioeconomic impacts on people who continued to smoke.

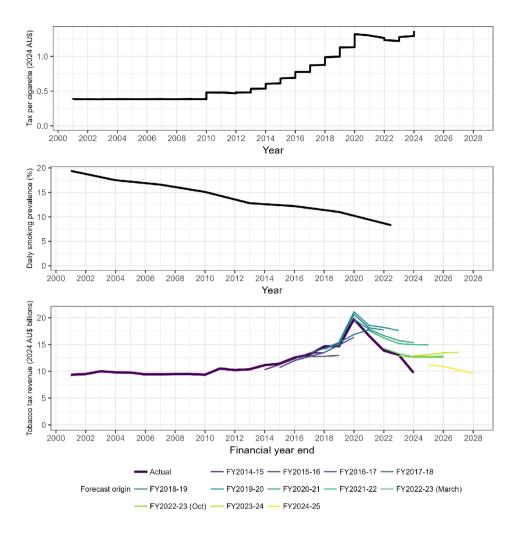
In short, the high price of tobacco in Australia resulting from these tax increases has likely stimulated the demand for cheaper alternatives among consumers, creating the conditions in which the black market has emerged. The period during which the black market for tobacco and vapes seemingly grew most rapidly, the price of legal tobacco had been relatively stable– there were no tax increases between 2020 and 2022 apart from indexation (see Fig. 2, top) [1, 2, 39]. In fact, during that time the indexation, which was linked to wages rather than the consumer price index, did not keep up with inflation, so the price of tobacco declined slightly in real terms. This suggests that the price point at that time (2020) was already sufficient to facilitate a profitable black market.

## The ban on consumer vapes

In addition to increasing demand for cheaper tobacco, the high price of legal tobacco products also increases the demand for substitute nicotine products in general. With shifting attitudes towards tobacco, demand has increased for cheaper, less harmful, more appealing, and more socially acceptable alternatives for both recreational and therapeutic use. In Australia, the demand for less harmful nicotine products is evidenced by recent rapid increases in vaping prevalence. Between 2019 and 2023, the prevalence of daily vaping increased approximately three-fold from 1.1 to 3.5% of Australians over the age of 14 [2]. Notably, the overwhelming majority of Australians who vape (96.1%) source their products without a prescription (i.e., from the black market) [2].

While the primary objective of tobacco control in Australia has been to reduce the use of combustible tobacco and its many related harms, the government has historically taken a more restrictive stance than other comparable countries in controlling the supply of forms of nicotine which are relatively less harmful, based on their independent health risks [11]. Since 1991, oral forms of nicotine including chewing tobacco and 'snuff' have been banned from sale in Australia<sup>1</sup>, and in 2008, nicotine was scheduled as a poison by the Therapeutic Goods Administration (TGA), with the exceptions of smoking tobacco and therapeutic goods [26]. In 2011, vapes containing nicotine were scheduled to be for therapeutic use with a medical prescription. The relative ease of acquiring the more harmful form of nicotine compared with less harmful products has been described by tobacco control and harm reduction experts as 'perverse regulation' [11]. The rationale presented by government agencies appears to only consider the potential absolute risks of these smokeless products rather than the risks relative to the wellknown harms of tobacco smoking.

<sup>&</sup>lt;sup>1</sup> Although this does not mean that loose leaf tobacco is not chewed. See, for example, Brady, M. (2002). Historical and cultural roots of tobacco use among Aboriginal and Torres Strait Islander people. *Australian and New Zealand journal of public health*, 26 [2], 120–124.





(Source: National Drug Strategy Household Survey [2]). Bottom: Australian Government Tobacco Tax revenue: actuals and projections (Based on Commonwealth of Australia data [47–57]

At the time of the rapid growth of the vaping black market between 2019 and 2022, nicotine vapes could only be acquired legally with a prescription online or through a pharmacy. One's ability to acquire a legal nicotine vape depended on knowledge of the process, access to a doctor who would write the prescription, and a pharmacy or overseas retailer who stocked these products. Nonnicotine vapes could be purchased without prescription legally in retail outlets and online. This allowed consumers to purchase non-nicotine vaping devices and nicotine separately. However, this ambiguous regulatory environment also created a space open for exploitation by black market actors supplying illicit nicotine containing vapes without listing nicotine as an ingredient [4].

Since 2023, the Australian Government responded to the rapid rise in the use of vapes with a series of legislative reforms which saw the ban of import of disposable nicotine-containing vapes, followed by the ban of all disposable vapes irrespective of nicotine content, and finally a ban of all consumer sale of vapes irrespective of both nicotine content and type of product (disposable or rechargeable). From 1 July 2024, the only legal avenue to purchase vapes in Australia was through pharmacies with a prescription as a smoking cessation tool, however, from 1 October the requirement of a prescription was lifted.

Under the current 'pharmacy model', vapes may be purchased from participating pharmacies subject to several conditions. These include a 'patient's' details and identity documents being presented and recorded; a mandatory consultation with a pharmacist in which the patient's medical history is discussed; an unsuccessful previous attempt to quit being previously undertaken by the patient using an approved cessation therapy (e.g., varenicline); and completing a Special Access Scheme notification upon both initial and any subsequent provision of a vape [58]. Pharmacists also have the right to charge patients an additional fee for any consultation. Pharmacists may only dispense vapes on the Therapeutic Goods Administration's notified vape list, with a maximum nicotine strength of 20 mg/ml (unless a prescription for a higher concentration is provided) [21]. Vapes may also only be dispensed in mint, menthol or tobacco flavours, and cannot be sold online [10, 59].

As previously noted, prior to the introduction of these new laws, the overwhelmingly majority of Australians who vape sourced their vapes from the black market [60]. Of those who purchased their vapes through legal means with a prescription, the majority did so online or in combination with legal vape shops- for example, by purchasing nicotine liquid from an overseas supplier and mixing it with locally procured flavoured vape liquid. Considering the high demand for, and relative availability of black market vapes, the current regulatory arrangements appear unlikely to provide sufficient encouragement for people who vape to switch to a legal product. Not only are the pharmacy restrictions cumbersome, costly and inconvenient, the products themselves are likely to be unappealing as the limited flavours that are available are amongst the least popular for adults who vape [61, 62].

Critically, many pharmacists have publicly committed to not supply vapes without a prescription [63], meaning that even if a vape consumer is motivated to switch, they may be precluded from doing so due to a lack of participating pharmacists in their geographical area. Further, the states of Western Australia and Tasmania have proposed laws independent of the Commonwealth to maintain the requirement of a prescription to obtain nicotine vaping products [64]. The preferred method for acquiring vapes by previously legitimate means, via online retailers, is no longer a legal pathway under the new legislation unless the patient has a prescription. These barriers and consumer disincentives to acquiring legal vaping products remain no better than the previous regulatory regime under which the black market was first established. Considering the comparative ease with which consumers have been able to acquire illicit vapes through tobacconists and social channels, it seems likely that the demand for these products will persist under current regulatory settings.

# Implications of the black market Criminal implications

From a criminological perspective, there are several reasons to be concerned about the displacement of the legal supply of nicotine products in favour of the black market. First, the creation of a black market has led to an alarming and unprecedented, though entirely predictable (and predicted) escalation in systemic violence. In the two years since January 2023, Australian news media have reported 212 firebombings of premises selling (or refusing to sell) illicit nicotine products, as well as multiple homicides, assaults, robberies targeting nicotine retailers, and the extortion and intimidation of law-abiding citizens who have been unwillingly co-opted as participants into the black market [5, 6]. Similar increases in robberies targeting tobacco retailers were also witnessed in New Zealand during periods of tax increases, albeit at a smaller scale [65, 66]. The reasons for this rise in criminal activity apply to all illicit markets to a greater or lesser extent. Put simply, there are vast profits to be made by supplying popular illicit goods. Without access to legal protections and systems of dispute resolution, systemic violence naturally emerges as a means for criminal actors to enforce informal contracts, acquire valuable illicit commodities, eliminate competitors, and expand their share of the market [67, 68].

In addition to systemic violence, there are a range of broader demonstrated and potential criminal consequences that stem from having a large, entrenched black market. For example, law enforcement agencies have stated that organised crime groups have used money acquired from the sale of black market nicotine products to fund other criminal activities, including money laundering and the trafficking and sale of other illicit drugs [16]. The profits to be made from black market nicotine products are substantial, with the black market for vapes in Victoria alone estimated to be worth between \$332 million and \$545.8 million [69], while the statewide value of illicit tobacco is estimated to be \$367.7 million [69]. According to a Victoria Police submission to a recent government inquiry, a single convenience store selling illicit nicotine products can generate 'tens of thousands of dollars a week of profit' [69].

Additionally, the involvement of criminal actors involved with the distribution of both illicit nicotine products and other illicit drugs raises the prospect that consumers of black market nicotine products may be exposed to other illicit drugs when engaging with criminal suppliers. This drug diffusion effect has the potential to expand consumer access to a wider array of illicit drugs and further entrench criminal supply networks.

Lastly, there are grounds for concern that under 18s involved with the social supply of illicit vapes may be at increased risk of subsequent criminality. Unlike adults who vape, who predominantly source illicit vapes directly from black market suppliers [60], 77.8% of teens who vape report being supplied by friends or family [60]. The social supply of vapes between teens has the potential to act as a gateway to involvement in more serious criminal activity. Criminological research suggests that early participation in illicit drug distribution via social supply can represent the beginning point of a criminal career which

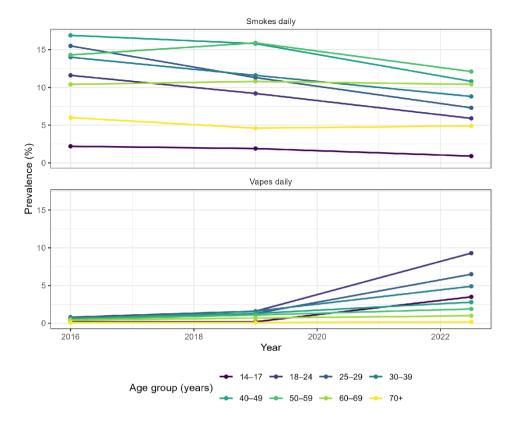


Fig. 3 Daily smoking and vaping in Australia by age group and year. Source: National Drug Strategy Household Survey 2016, 2019, 2022–2023 [2].

Note: the following estimates are not statistically reliable due to small numbers: 14-17 year olds who vaped daily in 2016 and 2019; 14-17 year olds who smoked daily in 2022-2023; and 70+ who vaped daily in 2016.

progressively leads to more serious forms of offending, particularly commercial illicit drug retailing [70–72].

## Public health implications

By its nature, the illicit market for tobacco and vapes undermines the function of public health policies which aim to reduce the harms from these products. The expansion of the illicit tobacco trade represents the *de facto* unwinding of Australia's flagship tobacco control policies- price increases via taxation as well as plain packaging and graphic health warnings. Whereas currently a pack of 25 cigarettes typically costs over \$50 from legal retailers, equivalent illicit products reportedly sell for around \$15 [69]- a price not seen in the legal market for over 10 years (or 8 tax increases). Additionally, a key concern driving restrictions on the availability of vaping products is the purported 'gateway effect' whereby dependence on nicotine vapes may increase the risk of uptake of smoking tobacco. Based on the rationale of these policies, the availability of both cheaper, branded tobacco and vapes through the black market should in theory undermine the major policy aim for Australian tobacco control- reducing smoking prevalence.

In contrast to these predictions, however, daily smoking rates have declined rapidly at the same time as the black market for both tobacco and vapes has expanded [73]. The steepest declines in smoking occurred in younger age-groups who had the greatest uptake in vaping (see Fig. 3), while the proportion of these groups who have never smoked is higher than ever before with 97.5% of 14-17 year olds being identified as never smokers in 2022-23 [2]. Similarly, when considered at a population level, concerns around a gateway effect have not come to pass in other comparable nations such as the United Kingdom [74], New Zealand [75], Canada [76] or the United States [77] where large-scale population surveys have similarly revealed steep declines in smoking prevalence coinciding with increased uptake of vaping. While not conclusive, these data suggest that rather than leading to increased smoking, the recent steep decline in smoking prevalence in these age-groups in Australia and elsewhere is largely attributable to substitution through the use of vapes.

The apparent reduction in smoking rates is a positive outcome for public health; however, the widespread use of illicit substitutes poses significant risks. The black market vaping products which are prevalent in Australia present greater health hazards than regulated alternatives due to the absence of enforceable safety standards [78]. Unlike legally sold vapes, black market products bypass quality and nicotine concentration controls, thereby undermining consumer protections. Current policies, which restrict access to legal vapes to individuals who are already smokers, aim to prevent uptake by non-smokers but inadvertently sustain and entrench black market supply. The widespread availability of black market vapes not only circumvents regulatory safeguards but also exacerbates health risks. Prior to the ban on non-therapeutic vaping products, many black market vapes containing nicotine avoided detection by omitting the drug from ingredient labels [78], further highlighting the challenges of ensuring consumer safety in the absence of a regulated consumer market.

As the health risks to children and young people is a major driver for the restrictive policy regime, it is critical to note that most of this cohort who vape acquire vaping products through social channels [60]. Without the ability to regulate ingredients, devices and packaging, and without restriction of availability, most of the potential health risks for young people are driven by the black market supply of vaping products.

In sum, the proliferation of the nicotine black market has not undermined the key goals of tobacco control and in fact may have contributed to their achievement. These positive developments are, of course, an unintended byproduct of government regulation and are, to some degree, offset by a host of negative implications associated with the black market.

#### Impact on tax revenue

A further notable consequence of the expansion of the nicotine black market has been the impact on the public purse. Excise and customs duties paid by consumers of legal tobacco, with the additional 10% Goods and Services Tax, have been a major contributor to the Treasury. With the introduction of large tax increases from 2010 to 2020, Treasury were able to counteract the decline in revenue corresponding with decreasing consumption of tobacco. This revenue stream is now in freefall, with a \$5 billion write-down in estimates for the financial year 2023-24, constituting nearly a third of all tobacco excise (Fig. 2, bottom) [79]. Further tax increases may compensate for some of these losses in absolute terms, however, it is likely that this will also contribute to growing demand for cheaper illicit tobacco. On current trends, actual excise revenue will fall further in coming years as criminal suppliers establish yet more control of the nicotine market. Based on this trajectory, the annual revenue from the tobacco tax is set to be lower than it would have been had the tax increases from 2010 to 2020 not occurred.

However, while continuing to revise their forecasts for future revenue, the Government appears optimistic that they can combat the decline through increased enforcement and further tax increases. Despite this, the total estimated shortfall from the highest forecasts to actual revenue until 2023–2024, and current forecasts for 2027– 2028 has amounted to \$25 billion [80].

The extent to which the shortfall in revenue is due to existing smokers switching to illicit tobacco or quitting smoking in favour of vaping is unclear. Nonetheless, as the vast majority of vapes are supplied through the black market, overall, the loss in revenue is a result of the illicit trade. It may seem mercenary to consider the financial implications of Australia's tobacco control policies against the more noble aims of protecting public health. However, these numbers are not trivial and are of major concern to the Australian Government given the longstanding function of the tax as a source of revenue. In effect, government enforcement measures are part of the tax administration system as characterised by the WHO FCTC [42]. Further, disregarding financial implications only makes sense if our increasingly restrictive tobacco control policies are effectively decreasing tobacco use and related harms- an outcome which is far from certain under current policy settings.

#### Law enforcement strategies

The solution to these problems, currently pursued by state and federal governments [10, 13], and advocated for by public health experts [4, 81], is to further expand our drug law enforcement regime. As discussed, this has included substantial increases in funding for the ABF, increased criminal penalties for the sale and distribution of illicit tobacco and vaping products, and the criminalisation of personal possession of vapes [15, 59, 82]. Further enforcement measures that have been implemented include a public reporting scheme whereby concerned citizens can report illegal sales, the introduction of licensing schemes for tobacco retailers, and improved efforts to 'harmonise' cooperation between state and federal law enforcement agencies tasked with combating the black market [4]. Additional measures that have been proposed, but not yet implemented, include introducing a track and trace system to facilitate monitoring of domestic tobacco retailing [4] and, more concerningly, changes to legislation to criminalise the purchase of illicit tobacco [83].

We have good reason to question the likely effectiveness of increased enforcement as a means to reduce the demand and supply of illicit nicotine. In general terms, Australia's contemporary War on Drugs is characterised by a disproportionate emphasis on supply-side restrictions over demand and harm reduction approaches [84], and has been notably ineffective in reducing both the demand and supply of illicit drugs. According to analysis of Australia's 'drug budget', in the financial year 2021-21, \$3.5 billion dollars was spent on drug law enforcement, approximately three times what was spent 15 years ago [84]. This increase in expenditure has been accompanied by record numbers of drug-related arrests, and record seizures of illicit drugs both at the border and on 'the street' [85]. Despite this, however, the prevalence and availability and use of our most popular illicit drugs, such as cannabis, cocaine, and MDMA, remains stubbornly high [60], and prices remain stable, and have even declined once adjusted for inflation [85, 86].

One of the primary reasons underlying the ineffectiveness of enforcement measures is that they invariably fail to meaningfully disrupt the flow of illicit drugs into the country. We know this because wastewater analysis provides us with estimates of the volume of drugs that are consumed nationally [87], which can be compared with seizure data provided by law enforcement agencies [85]. These figures show that the vast majority of illicit drugs, approximately 75-80%, that are sent to Australia successfully make it past border controls [85, 87]. The veracity of these figures has been acknowledged by the ABF, whose former Acting Commissioner recently conceded that 'even on a good day we're only stopping about 20-25%' [88]. The inherent porousness of the border, despite a sixfold increase in funding allocated to border interdiction between 2009 and 2021-22 [84], therefore casts doubt on claims by public health experts and the government that further increasing the resources available to the ABF will be effective in reducing the volume of illicit tobacco and vapes being successfully smuggled into the country.

By contrast, enhanced efforts to restrict the domestic retailing of illicit nicotine products are likely to be more effective, at least in the short term. This is because illicit tobacco and vapes are typically sold via tobacconists and convenience stores that are visible to the public and are therefore easily detectable by police and other regulatory agencies. It is likely, therefore, that a large-scale crackdown on illicit retailers would prompt significant market adaptation. This would most likely result in some retailers abandoning public sales from highly visible and easily accessible stores in favour of distribution via closed interpersonal networks, as is typically seen with other illicit drugs [89]. In Victoria, where the majority of black market violence has occurred, this strategy has been publicly acknowledged by law enforcement, with Victoria Police Detective Superintendent Adam Banks, recently stating that 'we want to force the industry back underground so mum and dad smokers can't just walk down the road to buy the illegal products' [90]. Such an outcome may decrease demand for illicit nicotine products, as consumers would face increased search costs in an effort to locate clandestine suppliers.

#### Counting the costs

There are significant social, financial, criminal, and criminal justice implications associated with increased enforcement that reduce its appeal as an effective and affordable policy solution. While it is beyond the scope of this paper to provide a detailed estimate of the financial costs of enhanced policing of the nicotine black market, previous research shows that local drug enforcement is hugely resource intensive and represents the single most costly component of Australia's national drug enforcement budget, costing approximately \$1.8 billion in 2021-22 [84]. Considering the extraordinary size and profitability of the nicotine black market, any large-scale enforcement operations that could produce a significant deterrent effect would necessarily represent a significant drain on both public finances as well as the resources of any specific agencies involved. Further, given the current recruitment 'crisis' facing many of Australia's law enforcement agencies [91, 92], it is not clear that police capabilities could be stretched to the extent necessary to carry out such operations, even if sufficient additional funding was forthcoming.

As a result of these challenges, the direct costs of a large-scale crackdown must be considered alongside opportunity costs, as agencies tasked with a black market crackdown would likely be forced to divert organisational resources away from other tasks and responsibilities. For police, this would necessarily involve deprioritising other, arguably more pressing crime problems (e.g., intimate partner violence, terrorism, cybercrime, other illicit drugs), while state health departments would have fewer resources to engage in their core tasks, such as disease prevention and the provision of mental health services. The cumulative burden of these costs means that any large-scale enforcement operations would likely be time-limited and focused on specific geographic areas. This increases the likelihood that any associated benefits would be short lived, and that more overt forms of retailing may remerge once a crackdown has ended.

In addition to the immediate impacts on enforcement and regulatory agencies, other costs associated with increased enforcement of illicit nicotine must also be considered. Perhaps most salient amongst these is the prospect of increased systemic violence. Contrary to popular belief, increased enforcement in drug markets typically increases rather than decreases systemic violence [93–96]. It has been suggested that this occurs due to the increased instability resulting from the imprisonment of market participants, which creates new opportunities for other criminal actors to enter and compete for market share [94, 95]. Increased enforcement and penalties also make it more likely that new entrants to the market are more risk tolerant and prone to engage in violence. This increases the likelihood that violence is used by market participants as a means to compete against one another [94–96]. Importantly, increased systemic violence not only poses dangers for market participants, but also amplifies threats to the safety of the broader public and their property.

Additionally, longer-term costs associated with increased enforcement include heightened pressure on the criminal justice system due to an increased number of court proceedings, an expanded prison population, and subsequent recidivist offending. These effects are likely to be substantial given the extensive size of the nicotine black market and the recent escalation in criminal penalties legislated by governments, including in Victoria up to 15 years imprisonment for the supply of illicit tobacco [10]. Proposed changes to criminalise the purchase of illicit nicotine products would likely further strain police and criminal justice resources to unacceptable level.

Policymakers should also consider who are most likely to be affected by these penalties. While there is limited scholarly research on the participants in Australia's contemporary black market for nicotine, a recent Victorian Government inquiry [69] and multiple media reports [7, 90, 97] indicate that many are not hardened offenders but rather are otherwise law-abiding store owners who have been drawn, often unwillingly, into the illicit trade. These individuals report being confronted with an invidious choice: either cease selling illicit nicotine products- risking their livelihoods and inviting retaliation from organised crime groups with publicly demonstrated capacities for violence- or continue their involvement in the black market and face severe legal consequences, including lengthy prison sentences. The prospect of criminalising nicotine consumers, people who are disproportionately concentrated amongst lower socio-economic groups and who have been priced out of the legal nicotine market, risks further entrenching disadvantage and is similarly unpalatable.

These scenarios raise critical concerns about the unintended consequences of heavy-handed enforcement strategies and, we contend, underscores the need for a more nuanced approach to managing the complexities of the nicotine black market.

#### Industry, advocacy, and heeding lessons from the past

The rise of the nicotine black market is a contingency that both the tobacco industry and criminologists [98–100] have warned about for some years. Both the high prices of tobacco products and prohibitionist policies regarding less-harmful alternatives have long been understood to fuel the illicit trade. While acknowledging these risks, the WHO and relevant government authorities have maintained that the growth of the black market can be restricted effectively through enforcement activities [42]. As such, warnings of the limits of enforcement have been consistently dismissed by public health advocates and decision-makers understandably suspicious of any arguments presented by a uniquely toxic industry that has demonstrated a long and lethal disregard for the truth.

Parallel to the dismissal of warnings regarding the black market, policymakers and prominent tobacco control advocates have similarly dismissed arguments in favour of harm reduction as 'industry talking points' rather than being opposed on their evidentiary merit [101]. We acknowledge that the interests of the broader nicotine industry will favour a less regulated environment in which they can grow their consumer base and profits- and conversely, that many public health advocates seek the elimination of that industry through regulation. However, what we are witnessing now is not so much a demolition of the nicotine industry, but rather a hostile takeover by criminal entities which have, so far, proven far more difficult to control than their much-despised legal counterparts.

The dismissal of concerns or policy approaches for being in the perceived interests of the tobacco industry is a simple argument to make, however, it is implicitly an ad hominem logical fallacy. While it is understandable to be sceptical of arguments when they are expressed by the tobacco industry, it does not mean those arguments are necessarily unreasonable or unjustified. Nor does it mean that policies which are perceived to be against the interests of the tobacco industry are inherently in the best interest of the public.

As this commentary has argued, the current restrictive regulatory environment has proven favourable to a large and growing black market resulting in a range of very serious negative outcomes. At the same time, the illicit trade undermines the commercial interests of the tobacco industry by introducing competition and undercutting their profits. As such, the policy settings which have facilitated the nicotine black market have served neither the interests of the tobacco industry nor the public.

Given the myriad problems associated with Australia's de facto War on Nicotine, it is necessary to critically reflect on other arguments made in favour of the current highly restrictive approach. Unlike comparable countries such as New Zealand and the United Kingdom, where the public health sector and governments have 'overwhelmingly' embraced nicotine harm reduction, Australian public health organisations have almost unanimously opposed improving access to less harmful nicotine products [102, 103]. This opposition has been underpinned by questionable claims that this commentary and previous research [27, 73] has addressed– particularly regarding the prevalence and effects of vaping among young people, including the discredited 'gateway effect,' and the potential effectiveness of law enforcement in curtailing black market activity.

Despite a lack of robust evidence, these claims have resonated with a general public alarmed by sensational rhetoric from public health organisations and governments at both state and federal levels, further amplified by alarmist reporting from the news media [104]. The policies resulting from this moral panic mirror the dynamics of the 'Baptists and Bootleggers' phenomenon observed in previous iterations of the drug war [105]. In this scenario, the implementation of decisive 'law and order' policies to combat exaggerated drug threats become the primary objective at the expense of the social, economic and health impacts of those policies.

An alternative framing sees the question of nicotine control being viewed from the perspective of 'failing to learn the lessons of the past'. Some of Australia's staunchest supporters of restrictive nicotine policies view any attempt to liberalise access to nicotine as repeating past mistakes [106, 107], namely allowing the tobacco industry to flourish and inflict untold suffering on consumers for profit. From such a perspective, and given the ruthless tenacity of the industry and its dishonest meddling in academic, public and political debate, any progress made at their expense must be protected at all costs.

We contend that the emergence of the black market despite the significant investment in law enforcement, while witnessing an accelerated decline in tobacco use, suggest that rather than learning from past, we have instead repeated a different mistake. As opposed to recalling past failures in tobacco control, criminologists and harm reduction advocates are more likely to view Australia's present nicotine control policies as failing to heed the lessons of the War on Drugs. These include the need to be realistic in managing the prevalence and impacts of drug use rather than aiming for a utopian 'drug free' future; to balance the effectiveness and harms of expensive and heavy-handed supply-side interventions with demand and harm reduction strategies; to differentiate between excessively harmful and problematic drug use and that which comes with acceptable health risks borne by autonomous and informed adults; and to recognise the importance of addressing rather than amplifying the structural causes of harmful drug use.

# Conclusion

The current state of Australian nicotine control leaves policymakers in a deeply uncomfortable situation. This commentary has outlined how the government's current approach to restricting the supply of nicotine has facilitated the growth of a dangerous black market. Along with it, this shift brings significant costs including systemic violence, loss of government revenue, and threats to the safety of both consumers and the wider public. These harms are accrued in addition to the opportunity cost of applying a harm reduction approach which has been successfully implemented in other parts of the world. The recent acceleration in the decline in smoking prevalence which has come alongside, and is likely due to, the rise of vaping shows that such an approach is viable. However, the illicit status of these products means that this is an unintended outcome of the failure of the current policies and is accompanied by harms that are not encountered in a context of legal supply.

Doubling down on this approach, as governments around the country currently appear intent on doing, risks further exacerbating present problems. The biggest risk, in our assessment, is that as the situation deteriorates further this will increase calls for yet more reactive restrictions that further intensify and entrench Australia's emerging War on Nicotine, creating a self-reinforcing spiral of negative outcomes that are continually amplified by counterproductive policies. This cycle is, we believe, already well in motion with regular calls from politicians and commentators in the news media to further increase penalties and enforcement [10, 64, 104] despite their demonstrated lack of effectiveness and failure to address the fundamental causes of the problem- i.e., strong, ongoing demand for nicotine in a context of readily available illicit supply.

To formulate more effective nicotine control policy, we contend that a robust evaluation of nicotine control policies is essential. This evaluation needs to consider the effectiveness of policies with respect to specific aims and unintended consequences, especially in the context of the role of these policies in driving the black market. Critically, the path forward further requires embracing the notion of 'nothing about us without us' and engaging in meaningful consultation with people who use tobacco, vapes and other nicotine products. This commentary has not specifically detailed the distribution of impacts of policy settings across the socioeconomic spectrum. However, this is a further key consideration which needs to be addressed in the formulation of equitable and effective policy as rates of smoking remain high in disadvantaged and marginalised populations who are also likely to disproportionately bear the costs of increased enforcement activities.

Nicotine consumers are voting with their feet, and increasingly preferencing the black market over restrictive legal channels of supply. Policymakers should be mindful of the factors driving this trend, the costs and limitations of supply-side restrictions and, we argue, rebalance efforts toward demand and harm reduction strategies. This may include re-assessing levels of tobacco taxation and establishing a legal, regulated market for less harmful nicotine products thereby weakening both demand and supply in the black market. While this would involve a substantial revision of the current strategy for nicotine control, such an approach would align with the harm minimisation principles which underpin Australia's National Drug Strategy [24]. Further specific policies advocated by tobacco and harm reduction experts include requiring all nicotine retailers to have a special license, mandatory standards for labelling and product safety, health warnings comparing the use of a less harmful nicotine product to the dangers posed by tobacco smoking, and risk proportionate taxation, whereby nicotine products are taxed more or less heavily dependent upon their relative health risks [12].

The experience of countries like Sweden, where the availability of harm reduction alternatives such vapes, snus, and nicotine pouches have led to significant declines in smoking and related mortality and morbidity [108], offers valuable lessons. Sweden is on track to become the first Western nation to achieve a smoke-free threshold of 5% daily smoking prevalence, demonstrating the potential benefits of adopting regulated alternatives. A similar approach in Australia– one that embraces harm reduction and affords easier access to less harmful nicotine products– would also help reduce crime, reduce government expenses, limit impacts on individual liberty, and improve public health in a more sustainable, equitable, and efficient manner.

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#### Data availability

No original datasets were generated as part of this research. All data analysed in the paper are available in the public domain as per the references provided.

#### Declarations

#### Ethics approval and consent to participate

This article is based on publicly available studies and data. It does not involve any direct research with human participants, and therefore, ethics approval and consent to participate are not applicable.

#### **Consent for publication**

Image 1 included in this article was sourced from the publicly available 'Say No to Vaping' campaign by the state government agency NSW Health. These resources are provided for public education and stakeholder use, and proper attribution has been given in the figure caption. Image 2 included in this article is a 'Just Say No' campaign image and is a public domain resource provided by the US Department of Health and Human Services. As such, no restrictions apply to its use. Proper attribution is provided in the figure caption. We have no other interests to declare.

#### **Competing interests**

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