



**GENERATION
VAPE**

A research collaboration project



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Assessing the impacts of Australia's vape laws on adolescents: early indicators of success

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Generation Vape would like to acknowledge the following partners

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Assessing the impacts of Australia's new vape laws on adolescents: early indicators of success

Introduction

In June 2024, Australia adopted laws that from July 1, prohibited the sale of all vapes, including those that do not contain nicotine, outside of pharmacies. The legislation aims to close the “non-nicotine vape loophole” that allowed retailers to sell mislabelled, illegal vapes and fuelled the dramatic rise in young people vaping.¹

Between July and October 2024, a prescription was required to access any vape from a pharmacy, and since October 1 all vapes should be available as behind the counter sales in pharmacies only, where state and territory laws allow. Adolescents under age 18 however still do require a prescription to legally access vapes. These vape access laws are part of a broader regulatory approach that also prohibits the importation and sale of any disposable vaping products and includes mass media campaigns educating young people about the harms of vaping.²

Globally, there is a great deal of variation in how vapes are regulated.³ Australia’s approach to regulating vapes is unique; by law they are restricted to pharmacies, only sold in tobacco and menthol/mint flavour, and required to meet specific quality standards. The driving force behind the legislation is to protect young people from vape/tobacco industry exploitation, while maintaining legal access to vapes for the small number of people who use vapes to quit smoking.

The aim of this short report is to assess the initial impact on adolescents aged 14 to 17, and establish a baseline for future monitoring, of the pharmacy-only vape supply laws that were phased in between July and October 2024. We provide topline measures of some early indicators of how the legislation is impacting on adolescent’s vape use attitudes, beliefs, knowledge, and behaviours. This evaluation will not only be of interest to Australian stakeholders, but internationally there is a groundswell of interest in how best to turn the tide on increasing youth vaping rates.

Methods

The Generation Vape research project includes online cross-sectional surveys at 6-monthly intervals examining vaping attitudes, beliefs, knowledge, and behaviours. From February 2022 (Wave 2), the research project has included a national sample of young people aged 14-17 (Wave 1 was NSW participants only).⁴ This short report presents survey findings from Wave 2 (February 2022) through Wave 7 (November 2024). All data for Wave 7 was collected following the 01 October 2024 national legislation changes requiring all vapes to be sold behind the counter from pharmacies. Sample sizes (number of respondents (n)) for each Wave are reported in Table 1.

For the purposes of these analyses, never vapers and never smokers include those who have only ever had a few puffs of a vape or a cigarette respectively.

Ethical approval for the study was received by the Human Research Ethics Committee at The University of Sydney (reference number 2021/442). Informed consent was provided by both parents and participants to take part in the research after receiving a detailed Participant Information Statement.

Findings

Vape Use

The proportion on “never-vapers” reported in Wave 7 was 85.7% and is the highest reported across all waves of data collection. This is a significant change since Wave 6, when 82.8 % reported never vaping ($p < 0.001$). This means that, encouragingly, the number of adolescents reporting any level of vaping intensity has significantly decreased. Notably, those reporting having vaped on 100+ occasions is now the lowest across all waves of data collection at 4.1% (Table 1).

A similarly encouraging trend is also observed in smoking rates, with the proportion of adolescents who report being a never smoker at its highest level across all waves at 93.9% for Wave 7. Only 1% of participants report having smoked more than 100+ cigarettes (Table 2).

Table 1: Have you ever used a vape?

% of all young people reporting ever having used a vape [^]							
	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	
Number of respondents (n)	n=2961	n=1817	n=1789	n=1623	n=2141	n=2990	p-values*
Never-vaper ^{^^}	82.1%	80.7%	80.5%	83.4%	82.8%	85.7%	p1<0.001
<10 occasions ^{^^^}	6.1%	6.2%	6.2%	5.6%	5.0%	4.9%	p2<0.001
10 to <100 occasions	6.5%	6.9%	6.2%	4.6%	5.5%	5.3%	
100+ occasions	5.3%	6.2%	7.1%	6.5%	6.7%	4.1%	

For all tables:

[^] Percentages are weighted for gender, state, remoteness and age of the 2016 and 2021 Australian populations (waves 1-4 and waves 5-7 respectively).

* p1 tests differences in proportions or means across all 7 waves, adjusted for sex, age, Aboriginal or Torres Strait Islander status, remoteness, SES, and language spoken at home. p2 tests differences between wave 7 and wave 6, using the same adjustments.

^{^^} includes those who only had a few puffs

^{^^^} does not include those who only had a few puffs

Table 2: Have you ever smoked cigarettes or other tobacco products?

% of all young people reporting ever smoked [^]							
	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	
Number of respondents (n)	n=2961	n=1817	n=1789	n=1623	n=2141	n=2990	p-value*
Never-smoker ^{^^}	90.2%	89.3%	91.8%	93.6%	93.3%	93.9%	p1<0.001
<10 cigarettes ^{^^^}	4.0%	4.4%	3.2%	2.9%	3.1%	2.6%	p2=0.459
10 to <100 cigarettes	3.9%	3.8%	3.6%	2.7%	2.3%	2.5%	
100+ cigarettes	1.9%	2.5%	1.3%	0.8%	1.3%	1.0%	

Vape purchasing behaviours

Of those who have vaped more than just a few puffs, just over a quarter (26.8%) in Wave 7 report buying their own vape. This is a significant change from Wave 6 where 36% reported buying their own vape (p2=0.034, Table 3). There has been no significant change across waves in where adolescents who purchased their vape bought their vape, with 44% reporting purchasing directly from a shop (tobacconist, vape store, convenience store or petrol station) and 26.5% stating they purchased the vape from a friend (Table 4).

Table 3: Did you buy the vape yourself?

% of ever vapers reporting purchasing own vape [^]							
	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	
Number of respondents (n)	n=599	n=352	n=355	n=287	n=390	n=439	p-value*
Yes	37.9%	34.3%	34.2%	35.0%	36.0%	26.8%	p1=0.033
No	62.1%	65.7%	65.8%	65.0%	64.0%	73.2%	p2=0.034

Table 4: Where did you buy the vape from?

% where purchased, asked of ever vapers who reported purchasing their own vape^							
	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	
Number of respondents (n)	n=226	n=122	n=125	n=98	n=137	n=117	p-value*
From a friend	17.2%	28.2%	30.6%	27.7%	29.6%	26.5%	p1=0.304
At a tobacconist or vape store	28.5%	26%	23.8%	22.4%	24.4%	26.8%	p2=0.160
At a convenience store	4.9%	11.4%	9.5%	12.6%	6.8%	13.3%	
At a petrol station	2.7%	6.0%	0.5%	3.6%	5.7%	3.9%	
Through Snapchat	13.1%	8.4%	12.8%	11.2%	9.9%	4.4%	
Through Instagram	2.3%	0.0%	0.0%	1.5%	1.5%	1.1%	
Through Facebook	0.8%	2.5%	1.8%	2.0%	1.6%	3.8%	
Online vape store	12.0%	6.1%	8.7%	3.9%	5.8%	5.3%	
From someone but not friend	14.7%	10.3%	9.7%	15.3%	13.3%	9.9%	
Other	3.6%	1.0%	2.4%	0.0%	1.5%	1.0%	

Social acceptability of vaping

Fewer adolescents in Wave 7 report that they would vape if one of their best friends were to offer them a vape. The strength of their conviction of refusal has also increased, with over half (50.5%) stating they would definitely not use a vape compared to only than 40% stating definitely not in Wave 2 ($p1 < 0.001$) (Table 5).

Significantly fewer young people are reporting that most of their friends vape, 8.1% in Wave 7 down from 14.9% in Wave 4, or some of their friends vape, 32.7% in Wave 7 down from 38.6% in Wave 4. A higher percentage are also reporting that while they know people who vape, their friends do not, with 42.5% in Wave 7 up from 38.6% in Wave 2 (Table 6).

Table 5: If one of your best friends were to offer you a vape, would you use it?

% would use a vape (Asked of never-vapers and ever-vapers who have not puffed 100+ times)^							
	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	
Number of respondents (n)	n=2780	n=1708	n=1659	n=1517	n=1987	n=2864	p-value*
Definitely yes	4.3%	3.5%	4.3%	3.2%	2.6%	2.6%	p1<0.001
Probably yes	19.0%	17.8%	13.8%	14.8%	11.5%	12.8%	p2=0.644
Probably not	36.9%	36.1%	34.0%	31.6%	33.1%	34.0%	
Definitely not	39.7%	42.7%	47.9%	50.4%	52.8%	50.6%	

Table 6: Do your friends vape?

% of all young people with friends who vape^								
	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7		
Number of respondents (n)	n=2961	n=1817	n=1789	n=1623	n=2141	n=2990	p-value* (p1)	p-value* (p2)
Most of my friends vape	11.0%	12.8%	14.9%	10.5%	9.5%	8.1%	<0.001	0.129
Some of my friends vape	38.2%	38.4%	38.6%	37.2%	34.5%	32.7%	<0.001	0.009
Know vapers, but not friends	34.6%	38.6%	33.9%	40.0%	40.8%	42.5%	<0.001	0.101
None of my friends vape	21.4%	16.3%	18.8%	19.2%	21.5%	22.6%	<0.001	0.224

Agreement with harms of vaping

Adolescents increasingly agree with the harms of vaping, with significant changes across a range of statements about the harms of vaping on the lungs, brain, and using vapes around other people. Nearly half of young people (48%) now agree that a prescription is needed to access vape, up from only 34% in Wave 2.

Fewer young people agree with positive statements about vaping, with only 8% agreeing that nicotine is harmless.

Table 7: Please indicate how strongly you agree or disagree with each of the following statements about vapes:

% of all young people who either agree or strongly agree								
	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7		
Number of respondents (n)	n=2961	n=1817	n=1789	n=1623	n=2141	n=2990	p-value* (p1)	p-value* (p2)
Negative statements about vaping:								
Vapes are unsafe to use	73%	74%	76%	79%	81%	82%	<0.001	0.783
Vaping can harm the developing brain	76%	77%	79%	81%	82%	82%	<0.001	0.280
Vaping can damage the lungs	85%	84%	85%	88%	89%	89%	<0.001	0.340
Vaping during adolescence can cause addiction	82%	82%	84%	85%	87%	87%	<0.001	0.819
It is unsafe to use vapes around others	59%	63%	65%	68%	71%	72%	<0.001	0.616
A prescription from a doctor is needed to buy a nicotine vape	34%	34%	36%	42%	44%	48%	<0.001	<0.001
Positive statements about vaping:								
Vapes are healthier than smoking tobacco cigarettes	37%	33%	30%	30%	26%	24%	<0.001	0.150
Vapes help smokers to quit	31%	30%	28%	31%	26%	25%	<0.001	0.700
Nicotine is harmless	10%	10%	11%	11%	10%	8%	<0.001	0.015

Discussion

There are fewer adolescents reporting ever vaping and fewer of those who do vape reporting purchasing their own vape. These are promising early signs that Australia may have reached peak levels of adolescent vape access and use. Continued monitoring will be required to determine if this pattern continues in the long term. Of those who do purchase their own vape, retail outlets continue to be a key access source for products, emphasising the importance of strict law enforcement of the retail sales ban. The rise in agreement that a prescription is required to access a vape is a further early indicator that vape access at retail outlets is shifting.

The social acceptability of vaping⁵ appears to have weakened with fewer adolescents with friends who vape and reporting being stronger in their conviction they would not vape, even if offered one by a best friend. Again, continued monitoring is needed to confirm if this is a trend that continues.

The increase in agreement with the harms of vaping is a very positive sign and an important first step in preventing vaping uptake. Education and knowledge alone are not enough to reduce young people's vaping and must continue to be supported by a strong regulatory environment and enforcement that is conducive to sustained behaviour change.

These early indicators that Australia is turning the corner on youth vaping, while positive, should not be seen as a cue to diminish vaping prevention and reduction efforts. The intensity of legislative change, including bans on vape advertising, community, school, and parent engagement, media campaigns,⁶ and news coverage of vaping have likely all contributed to these positive indicators. This whole of population approach is needed to ensure these early signs of success become a long-term trend.

Policy implications

Australia is among the first countries in the world to show early signs of success in slowing or halting the rise in adolescent vape access and use. High levels of ongoing enforcement and long-term monitoring are crucial to reaping the public health benefits of the strong vaping legislation. Unless vape importers and associated retailers know they will be subject to heavy penalties and loss of license to operate, they will continue to defy the laws, and young people will bear the health consequences of vape use and addiction. Continued focus on a comprehensive approach to both vape and tobacco use prevention and cessation is paramount.⁷

Citation

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