Source: *The Straits Times,* pB1
Date: 15 July 2025

What we can do to fight the insidious threat of 'zombie vapes'

Exposing the toxic brew in Kpods – and its devastating effects – is necessary to debunk the narrative that vaping is harmless and socially acceptable.

Teo Yik Ying

As drug-laced vaping technologies evolve, blending pharmacological experimentation with online marketing, our laws must evolve to match the sophistication and speed of these threats, says the writer. ST PHOTO: KUA CHEE SIONG

IS SINGAPORE LOSING CONTROL OF DRUG-LACED VAPES?

A frightening new vaping threat is on Singapore's doorstep. Under its influence, teenagers have been filmed stumbling, slurring their words, and behaving like the walking dead. The loss of control – including seizures and psychotic episodes – has unsurprisingly led to the vapes acquiring names such as "space oil" and "zombie vape".

What's worrying is that zombie vapes pose a threat not just to the health of users – so deadly that it has the potential to kill – but is also a challenge to the regulatory grip over emerging drug trends.

While laws could be toughened and enforcement stepped up, these won't suffice without dealing with the insidious nature of the threat we are facing. Specifically, unless the messaging challenge is tackled, we could lose the fight to the broad narrative that vaping is socially acceptable and harmless, an image that has propelled its popularity among young children, who are drawn by its sleek, candy-flavoured packaging.

A key part of the battle is to reveal what users are getting with their purchases of "Kpods" being peddled on Telegram and trafficked by transnational crime syndicates, and what damage these chemicals can do.

SPASMS, SEIZURES AND DAMAGED LUNGS

Consider first etomidate. It is used in hospitals for inducing sedation during medical procedures. In Singapore, it is classified as a poison under the Poisons Act and strictly restricted to licensed medical professionals only.

Designed to be injected directly into the veins under clinical supervision, etomidate is never intended to be inhaled directly into the lungs. When vaped, etomidate bypasses these safeguards and enters the lungs directly, potentially triggering spasms, breathing difficulties, seizures and even psychosis.

Even more disturbing is the expansion of narcotics found in vape juices. Globally, health authorities have detected vape cartridges laced with cannabis oil, methamphetamine, ketamine, fentanyl and even synthetic cannabinoids like "spice".

These substances are not merely harmful, they are also unpredictable. The dosage per puff varies wildly, and users often have no idea what or how much they are inhaling. A single vape can deliver a cumulative narcotic dose that risks overdose or respiratory arrest.

This opens a gateway to addiction that is far more insidious than past patterns involving sniffing or injection of narcotic substances, where users had at least a sense of volume and potency. Vaping, with no dosage indication, strips away even that minimal control.

Worryingly too, the design of today's vape devices can deliver nicotine in quantities dramatically higher than conventional cigarettes, equating to hundreds of cigarettes in a single pod. For an uninitiated teen, this means each puff unleashes a toxic feedback loop that accelerates dependence far faster than any cigarette.

The rapid spike in nicotine not only hooks them psychologically, but also paves the way for repeated exposure to harmful substances found in vape juices. These include oily solvents such as propylene glycol (sometimes used as a paint solvent) and heavy metals including lead, nickel and tin – all of which are not meant to be inhaled directly into the lungs. Some pods even carry formaldehyde, a known carcinogen.

When inhaled, these substances irritate and inflame the lungs' delicate tissues, causing scarring and reduced respiratory function. In severe cases, users may develop a condition called bronchiolitis obliterans, commonly known as "popcorn lungs", where the smallest airways in the lungs become irreversibly scarred, resulting in chronic coughing, wheezing and breathlessness.

Not only that, evidence published in the American Journal of Preventive Medicine showed that daily e-cigarette users were 1.8 times more likely to report heart attacks compared to non-users. This is because e-cigarette use acutely elevates blood pressure in a similar way to traditional cigarettes.

With drug-laced vapes, the risk of harm increases tremendously when potent narcotics that can depress our respiratory system are absorbed at a time when lungs are already inflamed and blood pressure is already elevated, thereby amplifying the lethality of the harm.

In short, vaping is destructive on multiple levels: it introduces oily solvents into the lungs, ravaging delicate lung tissues. With drug-laced vapes, not only do users inhale harmful solvents and heavy metals, but they also absorb potent narcotics that can depress their respiratory system, with potentially deadly consequences.

While the toxic chemicals in vape "juices" wreak havoc on the body internally, the external effects of vaping are manifesting themselves in shocking episodes across the world. In Hong Kong, videos have gone viral online showing teenage abusers copulating in public or passed out on trains and buses. In Britain, children high on "spice" have been admitted to intensive care in hospital after collapsing in school. Singapore too has witnessed disturbing cases of zombie vape victims, including a 13-year-old girl who was detained after she was spotted behaving erratically outside the State Courts while puffing on an e-cigarette.

HOW VAPING BECAME NORMALISED

Initially, vapes were insidiously marketed as less harmful than cigarettes, and found a foothold in Singapore, even if they were illegal. Today we realise that many adult smokers are dual users – of traditional cigarettes and e-cigarettes.

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Source: *The Straits Times,* pB2
Date: 15 July 2025

Wider enforcement, tougher penalties among possible steps

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Increasingly, vaping is happening at home, even in front of impressionable children. Adults who view vaping as "just a step down" from cigarettes risk passing a subtle nod of approval to their kids, and this normalisation inadvertently opens a gateway for curious youth to experiment with drug-laced vapes as the "next frontier".

Social media worsens the cycle. Influencers promote flavoured pods, emphasising "harmless trends" which are reinforced by online marketing that resembles candy advertisements rather than dangerous illicit substances.

And therein lies the danger: once normalised, especially without visible signs of overdose, the pathway to addiction becomes stealthy.

To halt this tide, society must reject and stigmatise vaping, especially since it is fundamentally a criminal offence in Singapore. Claims that e-cigarettes are safer than traditional cigarettes are dangerously misleading. They are often just as harmful, even more so when laced with narcotics.

And because it is impossible for e-cigarette users to determine the ingredients of vape juices, drug-laced vapes are virtually indistinguishable from the standard variants. Young people experimenting may not even realise what they are smoking until they find themselves overwhelmed minutes later.

LEGAL TEETH TO FIGHT NEW DANGER

To tackle drug-laced vapes, Singapore will have to go beyond the current measures against e-cigarettes. It will require legal and enforcement reforms.

First, we need to reclassify etomidate-laced pods under the Misuse of Drugs Act (MDA). Currently, etomidate is regulated under the Poisons Act, which attracts penalties of up to two years' imprisonment or a $10,000 fine for unlicensed access, sale or importation.

Singapore, like many other economies, takes reference from the International Narcotics Control Board to define the list of controlled drugs. Under that, etomidate does not fall under any of the three key categories of controlled substances.

Yet, China, Taiwan and Hong Kong have gone ahead and reclassified etomidate as a dangerous and controlled drug, in response to the growing problem of etomidate-laced vapes.

In Hong Kong, etomidate is now listed as a dangerous drug under its Dangerous Drug Ordinance where possession, consumption or inhalation carries up to seven years' imprisonment and HK$1 million (S$163,100) in fines, while trafficking or importing can result in life imprisonment and HK$5 million in fines.

Similarly, the Taiwanese authorities have reclassified etomidate to a Class III controlled drug, shifting it from pharmaceutical regulation to anti-narcotics legislation, while China's National Narcotics Control Commission has put etomidate on its list of controlled substances.

If etomidate-laced pods are reclassified as a controlled substance under the MDA, it would similarly mean more severe penalties, including longer imprisonment, mandatory rehabilitation and even caning for possession, inhalation, trafficking and importation without a licence.

This could deter both users and traffickers of such pods, who may be blase about the perceived "weaker" penalties for vape-related offences and for contravening the Poisons Act.

Second, Singapore can establish a clear, principle-based framework to determine when emerging compounds should be classified as controlled drugs.

This approach would enable the MDA to remain agile in the face of rapid innovation, where illicit drug producers continually tweak chemical structures or exploit legal grey zones to evade detection.

By anchoring drug classification not solely on chemical composition but also on real-world harm potential, abuse patterns and psychoactive effects, Singapore can pre-emptively close loopholes before new substances gains a foothold.

As drug-laced vaping technologies evolve, blending pharmacological experimentation with social media marketing, our laws must evolve just as swiftly to match the sophistication and speed of these threats.

Third, Singapore must significantly raise the penalties for vaping to send a strong signal of the escalating public health and criminal threat it poses.

As announced during the Committee of Supply debates in 2024, a review of the current penalties for e-cigarette use is already under way. One hopes this will lead to a substantial strengthening of enforcement and sentencing guidelines for users and sellers of vapes.

The normalisation of vaping in Singapore has created a dangerous contradiction: although the practice remains illegal, it is increasingly seen as socially acceptable or even cool, especially among youth. This acceptance fuels demand and opens the door to more sinister trends, such as drug-laced vapes.

This dangerous messaging needs to be countered and the public needs to know that vapes can harm lives and drug-laced ones can destroy them.

Tougher penalties for vape-related offences will send a clear and uncompromising message.

Fourth, it is time Singapore expanded the enforcement mandate beyond the Health Sciences Authority (HSA) to include agencies under the Ministry of Home Affairs.

While HSA has been the frontline agency enforcing the ban on e-cigarettes, its relatively small enforcement team is primarily geared towards addressing individual offenders and low-level distributors, but is not equipped to deal with the scale and complexity of today's threat.

Vapes, especially the drug-laced versions, are now being trafficked by organised crime syndicates with transnational links. These networks operate covertly through encrypted messaging apps, cross-border shipping routes and coordinated local distributors.

Tackling such sophisticated criminal operations requires the specialised investigative capabilities, intelligence networks and enforcement authority of agencies traditionally tasked with serious organised and narcotic crime.

Expanding the mandate would allow for more proactive surveillance, stronger deterrence through criminal investigation and ultimately more robust disruption of supply chains before such harmful substances even reach users.

PROACTIVE, NOT REACTIVE

The rise of Kpods highlights a critical flaw in our fight against vaping: our enforcement remains reactive.

If action is triggered only after HSA or the Central Narcotics Bureau catches users through urine tests or post-incident sweeps, society will perpetually be chasing the next wave.

Fighting drug-laced vapes is not merely a matter of policy, but also represents a defining battleground for youth health in the digital age. That is why we need a proactive system that anticipates emerging threats and intercepts them early, rather than reacting only after harm has been done.

We need a system that stops the pod before the puff.

• Teo Yik Ying is vice-president for global health and dean of the Saw Swee Hock School of Public Health at the National University of Singapore.

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