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Unintended consequences of a cautious approach to e-cigarette laws

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Unintended consequences of a cautious approach to e-cigarette laws

TO THE EDITOR: The Australian Government's decision to uphold a restriction on Electronic Nicotine Delivery Systems (ENDS), or "e-cigarettes", is in keeping with its highly effective tobacco control framework. In its March 2017 ruling, the Therapeutic Goods Administration outlined the lack of long term safety data around ENDS and the emerging evidence suggesting that availability of these devices may be associated with an increase in cigarette smoking in young adults.¹

While it remains illegal to sell ENDS products containing nicotine, an individual may import up to 3 months' personal supply with a doctor's prescription.¹ ENDS products are easily purchased online from overseas. Their attractive packaging and scent makes them appealing to children. As these products are not produced or licenced in Australia, there is no existing legislation around child-safe packaging or labels warning of potential toxicity.

The Centers for Disease Control and Prevention reported a rise in nicotine poisonings from one to 215 per month over a 5-year period,² the majority involving children aged under 5 years. Furthermore, a retrospective study of children aged under 6 years found that poisonings from liquid nicotine compared with traditional cigarettes were five times more likely to result in hospitalisation.³

Nicotine is both highly toxic and readily absorbable and, therefore, the potential for poisoning is high. Nicotine poisoning occurs through initial stimulation and ultimate blockade of the nicotinic acetylcholine receptor, resulting in hypotension, bradycardia and coma at high doses.⁴ The minimum potentially lethal dose of nicotine in humans is 60 mg.⁵ A review of e-liquid products purchased online found the standard nicotine concentration to range between 0 and 36 mg/mL.⁶ Therefore, ingestion of even a small volume could cause serious harm or even death.

We advocate for specific legislation to regulate the personal importation of these products. This legislation should include specific safety labelling highlighting the risks of poisoning in children and mandated supply in child-proof packaging. Given the inherent difficulties in preventing and regulating the online trade of ENDS products, we strongly encourage the federal government to partner with organisations such as Quit Victoria to highlight the potential dangers of all imported nicotine products, whether they remain prohibited or not.

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