



Submission to ACT Government consultation: restricting personal vaporisers (e-cigarettes)

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23 December 2014

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Key Points

1. Policies towards tobacco and nicotine replacement therapies are matters of cooperation among the Commonwealth, State and Territory governments. Australia's Intergovernmental Committee on Drugs is preparing a discussion paper on options for regulating nicotine vaping for ministers' consideration by the end of 2015.
2. According to the federally-agreed *National Tobacco Strategy 2012-2018*, it is the Australian Government's responsibility to "commission research on alternative nicotine delivery systems such as electronic cigarettes and smokeless tobacco to: examine the risks and/or benefits of these products; determine whether there is a need to increase restrictions on their availability and use; and identify the most appropriate policy approach for Australia."
3. Given these agreed national projects, there seems no point in the ACT Government initiating independent community discussion and regulation changes in advance of them.
4. The ACT Government Discussion Paper on *Options to protect the community from potential harms associated with personal vaporisers (e-cigarettes)* might, however, influence ACT residents' perceptions of vaping. It is therefore unfortunate that the Paper offers a biased, simplistic, dated, pro-regulation view of complex regulatory issues. Its approach risks suppressing vaping as a tool to improve smokers' health outcomes, and to reduce future uptake of tobacco products.
5. The ACT Paper proposes regulatory options without indicating their costs, and stresses that it is not seeking comment on the effectiveness of personal vaporisers in supporting smokers to quit – the main claimed benefit of vaping that would be lost under restrictive regulation.
6. The ACT Government's discussion of more regulation without any identification of costs and benefits, and without any consideration of interaction with regulations in other jurisdictions, illustrates how the growth of costly and perverse regulation in the ACT (and elsewhere in the federation) continues apace.
7. The ACT Paper asserts potential harms to the community from e-cigarettes, but does not give any estimated scale to the potential harms: neither quantitatively, nor within confidence intervals, nor even qualitatively. Available research already permits such approximate guides.
8. The Discussion Paper does not establish a case that there is any problem from vaping to be addressed by public policy. Its limited and dated references to international evidence on nicotine vaping are a very jaundiced reading of the information already available.
9. Implicitly, the ACT Paper applies an extreme version of the precautionary principle: "Whether the use of these devices is safe, however, remains unclear ... conclusive evidence ... will not be available for years or even decades." The Paper then canvasses that nicotine e-cigarettes should remain banned in the meantime, and that other regulations be introduced to support the ban.

10. The ACT Paper makes the common mistake of trying to judge the risks of vaping as a new technology against the unrealistic benchmark of no risk, not against the actual risks of smoking as an existing technology (i.e., inhaling both nicotine and the dangerous combustion products of tobacco via cigarettes).
11. On UK National Health Service assessment of international evidence, the toxins from vaping nicotine are about 1000 times less than from smoking cigarettes. Systematic evaluations show that vaping is proving more effective for limiting or quitting smoking than either unaided attempts to quit, or use of approved over-the-counter nicotine replacement therapies.
12. Some of the ACT Paper's alleged risks of nicotine vaping are ridiculous as grounds for health regulation: we are warned that e-cigarettes have rechargeable lithium batteries that may explode or catch fire during recharging (so might a mobile phone); or that nicotine vaping fluids could be mistakenly ingested (so might bleach), or that some e-cigarettes may be misused with illicit drugs (so might any number of everyday objects).
13. The ACT Paper makes much of the risk of vaping leading to smoking, or 'renormalizing' smoking, especially for the young. But on the evidence vaping appeals overwhelmingly to smokers rather than non-smokers, and that vaping is 1000 times less injurious than smoking, for every one youngster who goes from smoking to vaping, there would have to be 1000 going from vaping to smoking before there is net harm rather than a net benefit. To the contrary, American evidence is that 9 out of 10 school-age vapers started as smokers.
14. If these estimates or anything approaching them are borne out, then the spread of vaping would be a huge public health net benefit. This idea is not contemplated in the ACT Discussion Paper.
15. There are good grounds to consider a 'pro vaping, quit smoking' stance in the ACT's regulatory input to Australia's federal review of policies towards vaping.
16. Vaping nicotine may yet prove to have some long-term harms to the user, and may be considered by some to be a 'vice'. But if so, the harms are less than the harms of tobacco, and no one is harmed but the persons who choose to vape. The Paper advances no convincing reason for government to regulate this 'vice'.
17. The premature timing of the ACT Discussion Paper and its dubious quality aside, there seems little sense in conceiving of a separate, restrictive ACT regulatory policy on vaping. If there were a more restrictive ACT policy, e-cigarettes could be obtained a few minutes away in Queanbeyan, under any less restrictive rules NSW enacts. Or they could continue to be obtained over the Internet from overseas, as at present. The only practical consequence of separate, restrictive ACT action would be that protection to vapers under Australian consumer law against products of untested quality would be complicated and in practice, lessened.

A. Introduction

The ACT Government's Discussion Paper on *Options to protect the community from potential harms associated with personal vaporisers (e-cigarettes)* frames the vaping issue so as to favour generally maintaining prohibitions on nicotine vaping and strengthening restrictions on other vaping. But the approach in the Paper is deeply flawed, and illustrates how costly and perverse regulation in the ACT (and elsewhere in Australia) continues to grow.

The Paper proposes a raft of options to which the ACT government is obviously favourably disposed: to maintain the prohibition on e-cigarettes that contain nicotine; to spend public money on unspecified "community education and awareness raising activities" (presumably to discourage all vaping); to restrict or ban the sale and promotion of non-nicotine personal vaporisers; and to clarify (by either banning or specifically permitting) the use of vaporisers in smoke-free areas (such as bars, and cars carrying children). In this last case, the arguments in the Paper clearly suggest the ACT Government would favour banning.

The Discussion Paper invites community and individual views on these options without giving any estimates of what each option may cost. More remarkably, in what may be a first for public policy making and expanded regulation, it strictly abjures discussion of potential key benefits forgone as a consequence of proposed regulation:

"In responding to the discussion paper, please note that the ACT Government is not seeking comment on the effectiveness of personal vaporisers in supporting smokers to quit. This is a matter for the [Commonwealth's Therapeutic Goods Administration] and beyond the scope of this discussion paper."

(Discussion Paper, p 5; further page references are to this Paper, unless otherwise specified. Other sources are as cited in the bibliography.)

This seems an egregiously silly approach to expanding regulation in an already highly regulated jurisdiction.

I had initially hoped to play my minor role as an ACT citizen interested in good public policy by merely filling in the on-line survey (which I have in fact done, also giving my permission for the publication of my input). But not surprisingly given the strictures of the Discussion Paper, I found the survey so structured as to discourage consideration of a full range of options. The survey asks citizens what they perceive as the benefits, costs and risks of various restrictive options. But those issues are not only — or in some cases not at all — matters of uninformed perception. They are largely matters of fact and evidence, on which the Paper is silent, dated or biased.

The remainder of this submission is structured as comments on some of the key aspects of the Discussion Paper that need to be clarified in formulating any efficient proposals for any additional regulation of e-cigarettes, or relaxation of existing restrictions. It concludes with the author's specific responses to the questions posed in the Paper.

B. Framing the issues

How the regulation of vaping is framed greatly affects how one views the regulatory options:

- Is the starting point reality that vaping supplies (including nicotine) can be obtained from abroad over the web without any purchaser age limits, quality control, or practical consumer redress? If so, legal supply in Australia under general consumer protection laws (and arguably, some specific health regulation such as age restrictions on purchase) may be an improvement.
- If nicotine vaping greatly reduces harm relative to smoking (after allowing for any harm from the uptake of vaping among non-smokers), it may be better to facilitate it than to leave tobacco and approved, costly, nicotine replacement therapies as the only regulated and quality-controlled options.
- Is the benchmark for considering risks a hypothetical virtuous citizenry, using no stimulants and taking no risks, or the practical starting point where adult citizens choose to use a variety of stimulants (alcohol, tobacco, caffeine, chocolate etc., not to mention illegal drugs) and accept the associated risks?
- If prolonged nicotine and other vaping might cause unknowable health issues in decades to come, to what extent are these issues for individuals to judge, and to what extent are they legitimate public policy issues?

While the last two issues are partly philosophical and value-laden ones addressed at the end of this submission, the first two are essentially empirical issues. The ACT Paper doesn't address these framing issues or help with the empirics, but the following comments may better clarify some of the policy choices.

C. What are the Commonwealth and the other States and Territories doing?

The ACT Paper notes that that nicotine vaporisers cannot be sold legally in the ACT. Their sale is apparently illegal in all States and Territories. Sale of nicotine in cartridges is prohibited as a Schedule 7 poison under the Standard for Uniform Scheduling of Medicines and Poisons (National Tobacco Strategy 2012-

2018, p 31).¹ All vaping supplies including nicotine seem to be easily available for personal import via the web.² The ACT Paper (and various government web sites) are coy about the precise legal status of personal imports, but low value personal imports such as vaping supplies would seem to be practically unstoppable at any reasonable cost to authorities or citizens.³

D. Why an ACT Government discussion paper now?

Policies towards tobacco and nicotine replacement therapies are matters of cooperation among the Commonwealth, State and Territory governments. Australia's Intergovernmental Committee on Drugs is preparing a discussion paper on options for regulating nicotine vaping for ministers' consideration by the end of 2015.⁴

According to the *National Tobacco Strategy 2012-2018*, participating governments have assigned to the Australian Government responsibility to "commission research on alternative nicotine delivery systems such as electronic cigarettes and smokeless tobacco to: examine the risks and/or benefits of these products; determine whether there is a need to increase restrictions on their availability and use; and identify the most appropriate policy approach for Australia."⁵

Given this framework, there seems no point in the ACT Government initiating community consultations on independent changes to regulation separate from this agreed national project.

E. Principles for good regulation

Gary Banks, the Dean of the ANZ School of Government and former Chairman of the Productivity Commission, has drawn on work of the Office of Regulation Review to sketch the requirements for good regulation:

"Defining what is good regulation is a starting point for doing better. To qualify, regulation needs to exhibit several characteristics (ORR 1998).

1. It must actually do good. It must have a sound rationale and be shown to bring a net benefit to society, requiring costs as well as benefits to be brought into account.

¹ It seems, however, from the source cited at footnote 7 of the ACT Paper that personal vaporiser liquids sold in NSW frequently contain nicotine.

² See for example NicVape, the US-based "premier supplier of premium e-liquids world wide": <http://www.nicvape.com/Unflavored-Nicotine-Liquid>

³ For reasons why more intensive Customs inspections of personal imports of very low value would be disruptive and costly, see Productivity Commission (2011), Chapter 7 and Appendix H.

⁴ *The Australian*, Sean Parnell, 10 December 2014.

⁵ Action 6.7.5, p 32 of *National Tobacco Strategy 2012-18*.

2. It must be better than any alternative regulation or policy tool. It is not enough to compare a regulation to a counterfactual of no regulation, but to compare outcomes across all feasible policy alternatives.
3. It must be robust to errors in the assumptions underlying it. While portrayed as a dull bureaucratic process, many regulations could be more aptly likened to risky experiments. The regulatory appraisal process should take explicit account of the likely outcomes if the regulator turns out to be wrong about aspects of the effects of the regulation. Certain errors may completely overturn the gains from regulations and knowledge of these may make it sensible to re-design the regulation or, in some cases, not to proceed at all.
4. It should contain the seeds of its own destruction. Good regulations should not presume their own immortality, but allow for ongoing appraisal of their risks and continued effectiveness. If a regulation endures, that should be because it continues to pass stringent tests.
5. It should state (ex ante) what it is going to do and, as far as possible, establish verifiable performance criteria. This tests a regulation for precision and relevance, and provides a basis for assessment of ex post effectiveness. If a new safety standard is approved for small boat safety, how many drownings and accidents is it expected to avoid? If speed cameras are deployed for reducing accidents do they do so and by how much?
6. It should be clear and concise. It should also be communicated effectively and be readily accessible to those affected by it. Not only should people be able to find out what regulations apply to them, the regulations themselves must be capable of being readily understood.
7. It should be consistent with other laws, agreements and international obligations. Inconsistency can create division, confusion and waste.
8. It must be enforceable. But it should embody incentives or disciplines no greater than are needed for reasonable enforcement, and involve adequate resources for the purpose.
9. Finally, it needs to be administered by accountable bodies in a fair and consistent manner.” (Banks 2003, point numbering added)

The ACT Paper’s proposed regulatory and ‘education’ measures fail several of the most important of these tests:

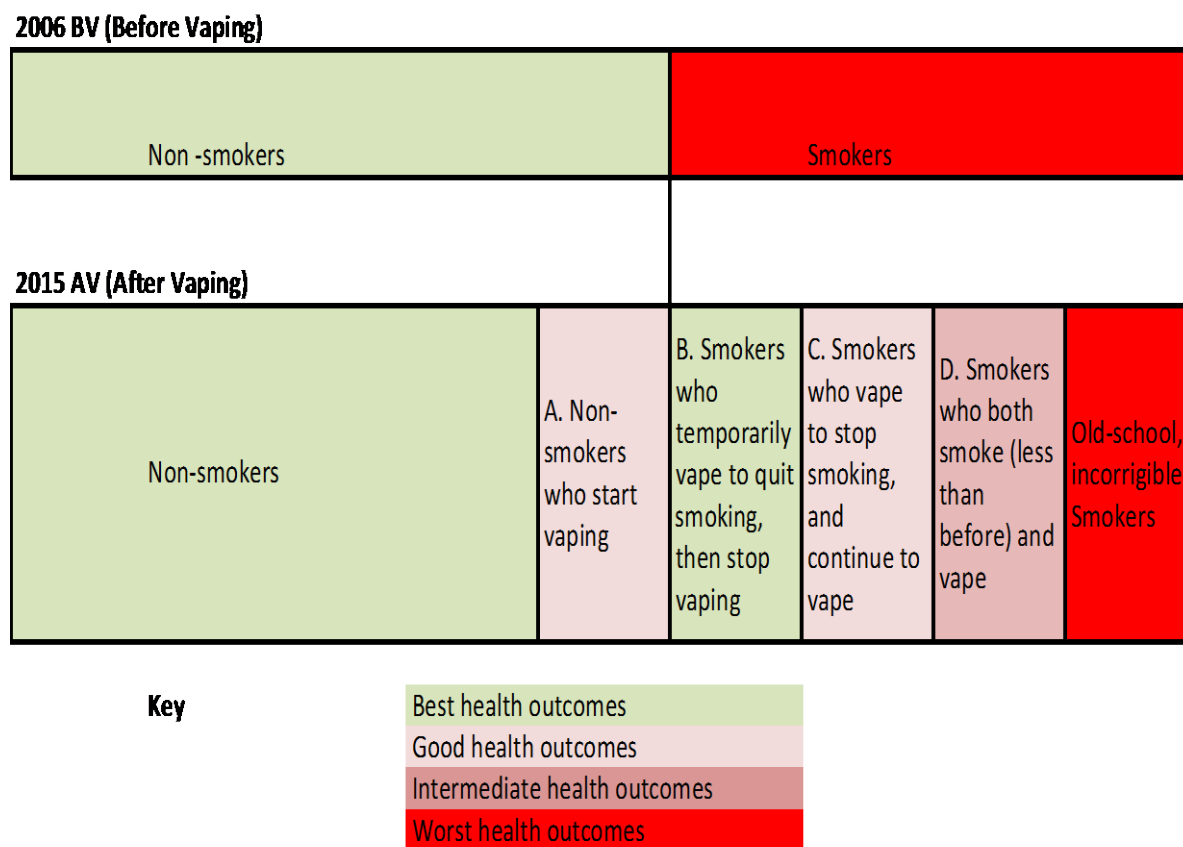
- They are unclear as to their intent (to stop vaping? To slow its growth? To improve health outcomes? - point 1 above);
- There is no attempt to compare alternative regulatory approaches (point 2);
- There is no proposed review process or sunset clause, should new information on vaping ever become sufficient to allay regulators’ concerns (point 4); and
- They are unclear as to what would constitute success for the proposed actions. If the objective is to stop vaping, is there the slightest chance of success? If the objective is merely to slow growth in vaping, how little vaping is acceptable? If the objective is to improve health outcomes, how is that to be tested? - point 5 above.

The plausible claims that nicotine vaping is substantially harm minimizing for society as a whole deserve more serious consideration than they receive in the Discussion Paper. There seems a real prospect that seeking to prevent vaping by the ill-defined regulations proposed would worsen overall health outcomes relative to feasible alternative regulatory approaches.

F. The key empirical questions: population responses and toxicity issues

Vaping technologies only appeared in Europe about 2006, and studies of health outcomes are necessarily limited in the follow-through of vapers' experience. The health impacts of vaping are empirical issues, resting on both the behavioural responses of the population to e-cigarettes as an innovative means of nicotine (and other vapour) intake, and the toxicity of nicotine vaping relative to that of smoking. The following diagram helps visualize the behavioural response possibilities.

Schematic representation of behaviours after the emergence of vaping (not to scale)



The interesting empirical questions seem to be:

1. Do more former smokers use vaping temporarily to help stop smoking (area B) than there are non-smokers who start vaping (area A)?
2. How many smokers use vaping to stop smoking, but continue to vape (area C)? (Area D comprises 'dual users' who both vape and smoke. Presumably they damage their health roughly as much as other smokers with the same tobacco consumption.)
3. What are the toxicities of vaping relative to those smoking?

Even without data, the diagram reminds us that there are three categories of potentially improved health outcomes (among smokers) and only one category of potentially worse health outcomes (among non-smokers who start vaping).

Turning now to data, there are intriguing but still limited studies from the US and Europe suggesting rough quantitative answers to question 1 and 2. This writer's reading of the current evidence is that it is almost exclusively smokers who take up vaping, and that the small proportion of non-smokers who experiment with vaping do not seem to progress to regular use (McRobbie, Bullen, Hartman-Boyce and Hayjek, p 7). Moreover,

“Regular use of electronic cigarettes amongst children and young people is rare and is confined almost entirely to those who currently or have previously smoked.” Action on Smoking and Health, October 2014, p 1.

However young people (including non-smokers) in a US focus group discussion said that they are open to experimenting with vaping. (German Cancer Research Center, p 19).

Overseas studies have not yet clarified how many former smokers who use vaping to stop smoking nonetheless continue vaping indefinitely (area C). Anecdotal evidence identifies smokers who have successfully made only temporary use of nicotine vaping to stop smoking (area A), and there is evidence that even non-nicotine vaping (which one imagines would be non-addictive) can help both to quit smoking and to prevent resumption (German Cancer Research Center, p 31).

If the evidence on numbers of people responding to the emergence of vaping is still rough, the evidence on question 3 – the relative toxicity of vaping compared to smoking – is very striking, if still not precise. According to the UK National Health Service's reading of the evidence, the toxicity of nicotine vaping is only about one thousandth the toxicity of smoking (See Box 1.) One might expect the damage to health from vaping to be also roughly one thousandth that of smoking.

Box 1: Vaping one-thousandth as damaging as smoking?

UK House of Lords Question, 20 November 2013

Asked by Viscount Ridley

To ask Her Majesty's Government on what evidence they based the information on the NHS website that the toxicity of e-cigarettes is one thousandth of that of tobacco cigarettes.[HL3232]

The Parliamentary Under-Secretary of State, Department of Health (Earl Howe) (Con): The National Health Service website states that the level of toxins in electronic cigarettes is about one thousandth of that in cigarette smoke, which came from the findings of United States scientists Zachary Cahn and Michael Siegel published in the Journal of Public Health Policy in December 2010.

The available evidence is that electronic cigarettes are likely to be substantially less harmful than smoking tobacco cigarettes; however, the scientific evidence on the long-term health effects of using these products is limited.

As the science writer Matt Ridley (the same Viscount Ridley of Box 1) has argued, such a huge difference in toxicity implies that, for every person who goes from smoking to vaping, there would have to be 1000 going from vaping to smoking before there is net harm rather than a net benefit. He notes that American evidence is that 9 out of 10 school-age vapers started as smokers, rather than being drawn to vaping from non-smoking (Ridley 2013).

Moreover, there is earlier, analogous evidence that large net health benefits are obtained by switching away from tobacco towards other means of using nicotine: the Swedish experience with snus (Box 2).

If anything even roughly in the ballpark of the foregoing evidence and estimates hold true, then if vaping became considered 'cool' and 'clean', and smoking became regarded as 'old fashioned' and 'dirty', that would be a huge net public health benefit.

The informational and regulatory stance that would help produce such an outcome is totally different from that advanced in the ACT Discussion Paper. A 'pro-vaping, quit smoking' information and regulatory regime is worth serious exploration, rather than the antagonistic treatment given to vaping in the ACT Paper.

**Box 2: Using nicotine to quit smoking: the example of snus:
Smoking (and European regulation) kills: Matt Ridley, March 2014**

“The Swedes are also [ahead of the rest of Europe](#) in tackling smoking. They have by far the [fewest smokers](#) per head of population of all EU countries. Lung cancer [mortality](#) in Swedish men over 35 is less than half the British rate.

Have they done it by being more zealous in ostracizing, educating and shaming smokers in that paternalistic Scandinavian way? No — they did it through innovation and competition. In the 1980s Swedes developed a tobacco product called snus, which you put under your upper lip. You get the nicotine but not the tar. Snus [is the most popular and effective way](#) of quitting smoking in Sweden (and Norway).

You will not have seen snus on sale in Britain, for the simple reason that the EU banned it. When Sweden joined the EU, it negotiated a special opt-out. [To this day](#), despite abundant evidence that snus is saving Swedish lives by the bucket-load, despite advice from experts, and despite a devastating critique of its own feeble defence of the policy, the European Commission remains committed to the snus ban.”

G. Long term health effects of vaping and the precautionary principle

The ACT Paper seems to favour an interpretation of the precautionary principle that implies that the risks of vaping as a new technology must be measured against ‘perfection’ (conceived of as zero risk), not against the risks of smoking as the dominant existing nicotine technology:

“Whether the use of these devices is safe, however, remains unclear ... conclusive evidence ... will not be available for years or even decades.” (p 2)

The Paper then proposes that e-cigarettes should remain banned in the meantime, and that non-nicotine vaping be restricted or banned.

As Matt Ridley has pointed out, this implicit counsel of zero risk has caused many perverse policy decisions: see especially his insightful outline of how the EU’s ‘precautionary principle’ bans on neonicotinoid pesticides meant to avoid any hypothetical risk to bees, has in fact produced devastating actual risks (Ridley, October 2014).

While it is obviously true that the long-term effects of vaping nicotine are unknowable yet for a technology only introduced around 2006, everything we do

know suggests fears of large future dangers are overstated. Brown *et al* (2014, p 1537) note:

“... the existing evidence suggests the associated harm [from long term vaping] may be minimal: the products contain low levels of carcinogens and toxicants and no serious adverse event has yet been reported in any of the numerous experimental studies. Regardless, the harm will certainly be less than smoking.”

McRobbie, Bullen, Hartmann-Boyce and Hajek (2014, p 7) also conclude from their meta-analysis of many studies that:

“Long-term effects beyond 12 months [in the duration of the studies reviewed] are unknown, and although these may emerge in due course, it is highly likely that, based on what is known about liquid and vapour constituents and patterns of use, there will be few risks and fewer adverse health effects than from ongoing smoking.”

The ACT Paper’s proposed discouragement of vaping seems likely to produce perverse public health outcomes. This is because the health costs of smoking are very high and the toxicity of nicotine vaping is so very much lower than of smoking that remaining uncertainties about the precise magnitudes of areas A, B, C and D in the diagram above are swamped.

It is the magnitude of this imbalance that needs to be factored in to ACT Government regulatory thinking. The present Discussion Paper does not do so, and to that extent, it prejudices the public opinions about vaping that it seeks to gather through its questions.

H. Reading the evidence

While early evidence on the health impacts of vaping and its efficacy in helping smokers to quit was sparse and bedeviled by wide variation in quality and performance consistency in nicotine delivery of early model e-cigarettes, evidence is steadily building from a low base. A high quality review building on large numbers of subjects in two randomized controlled trials and other high-quality studies has been published only since the ACT Discussion Paper was finalized (see McRobbie *et al* (2014), in the influential Cochrane Database of Systematic Reviews.) Box 3 explains why the Cochrane Review process is important.

Even with the small number of earlier studies cited in the ACT Paper (e.g. its footnotes 6, 8 and 9), the Paper’s authors take a very jaundiced view of those studies’ evidence, and indeed misrepresent the thrust of some of the cited papers.

Box 3: Why are Cochrane Reviews influential?

“A Cochrane Review is a scientific investigation in itself, with a pre-planned methods section and an assembly of original studies (predominantly randomised controlled trials and clinical controlled trials, but also sometimes, non-randomised observational studies) as their ‘subjects’. The results of these multiple primary investigations are synthesized by using strategies that limit bias and random error. These strategies include a comprehensive search of all potentially relevant studies and the use of explicit, reproducible criteria in the selection of studies for review. Primary research designs and study characteristics are appraised, data synthesized, and results interpreted.”
See <http://www.cochrane.org/cochrane-reviews>

For example, the ACT Paper reports the views of Hajek (2012) as: “Advocates of personal vaporisers suggest they could be the next generation in aids to assist smokers to quit and, *if properly regulated*, could significantly reduce tobacco-related harms. *There is currently limited evidence to support the use of personal vaporisers as a quitting tool.*” (p 3, emphasis added)

In fact, Hajek argues against excessive regulation, and demonstrates an open-mindedness lacking in the ACT paper (Box 4).

Box 4: Peter Hajek, Wolfson Institute of Preventive Medicine: *E-cigarettes: a vulnerable promise* (2012)

“If we ban [e-cigarettes] or make them jump through hoops and choke them in red tape, the deadly [conventional cigarettes] will continue to rule unchallenged. The general approach to [e-cigarettes] at the moment seems to be dictated by an a priori suspicion that they are bad. Wagener *et al.* show that the main objections to [e-cigarettes] generated so far are largely spurious. Others can be added to the list. I have heard it argued that if [e-cigarettes] are not regulated, some smokers may purchase brands which deliver little nicotine or deliver it inconsistently. No regulation is needed on how much caffeine different brands of teabags must deliver (the drug content is not even marked), or how tasty and consistent in taste a chocolate bar has to be, or how entertaining a film must be. Consumer products which are not very good will leave a few purchasers disappointed, this is true, but such products will not stay on the market for long, and their failure becomes a valuable benchmark for everyone else.”

As for the ACT Paper’s proposition there is currently limited evidence to support the use of personal vaporisers as a quitting tool, that view is wrong and is being contradicted by the day: see e.g. Brown, Beard, Kotz, Michie and West (2014),

and McRobbie *et al* (2014), who cite methodologically sophisticated studies with large numbers of smokers.

- Brown *et al* shows that vaping tends to be more successful than approved over-the-counter nicotine replacement therapies or unaided attempt to stop smoking, but that even better (though still low) success rates are achieved from behavioural support using prescription nicotine replacement therapies.
 - The result raises the tantalizing possibility that the best of all quitting outcomes might arise from behavioral or informational support for the use of vaping to quit or reduce smoking – an option not considered in the ACT paper.
- McRobbie *et al* closely examine randomized control trials (RCTs) and other high-quality studies and pool data in meta-analysis, and find that nicotine vaping significantly increased success in quitting and in reducing smoking relative to a control group using non-nicotine e-cigarettes as a placebo.
 - This is a conservative result because some in the control group would also succeed in cutting or stopping smoking due to the widely noted sensory and behavioral satisfactions to smokers of vaping, even without nicotine.
 - While the overall number of trials is still low and therefore limits statistical confidence in the results, this recent study will prove influential – see, for example *The Economist* of 20 December 2014.

While the ACT Paper takes a pessimistic reading of available information on the utility of vaping to reduce or limit smoking, it takes very expansive view of the relevance to health policy and health regulation of a range of possible future terrors (pp 3-6). At places its arguments seem to be modeled on *Reefer Madness*.⁶ I provide only brief comment below:

- Because vaporisers use rechargeable batteries, they might explode, cause burns, oral disfigurement, blindness, and car and house fires (p 3, and fn 5).
 - Comment: Such concerns are properly handled under general consumer protection law. If the ACT Government is concerned that personal imports of vaping supplies create only tenuously enforceable consumer protection rights, it should legalise the sale of all vaping supplies in the ACT so that Australian laws clearly apply.
- Some e-cigarettes might facilitate use of illegal drugs.
 - Comment: So might teaspoons, cigarette lighters, PET soft drink bottles, syringes etc.

⁶ As summarized by IMDb, the cautionary 1936 movie features a fictionalized and highly exaggerated take on the use of marijuana. A trio of drug dealers lead innocent teenagers to become addicted to reefer cigarettes by holding wild parties with jazz music. This leads to worse — much worse.

- Nicotine for vaping could be accidentally ingested or otherwise misused.
 - Comment: So could bleach, or any number of everyday household or hardware products. Again, any dangers could be made clear to consumers through appropriate product labeling if vaping supplies were sold legally in the ACT.
- Nicotine is not a benign drug, and should be avoided by (for example) pregnant women.
 - Comment: risks of nicotine itself (absent the tars and other toxins in cigarettes) are slight, as evidenced by the over-the-counter availability of approved nicotine replacement therapies and experience with nicotine inhalators. Remaining small and specific risks could be made clear to consumers through appropriate product labeling if vaping supplies were sold legally in the ACT.
- Vaping could undermine decades of public health efforts to control tobacco use, by attracting children to vape and then smoke, and 'renormalising' smoking.
 - Comment: The evidence cited above is that vaping appeals overwhelmingly to smokers, and that non-smokers experimenting with vaping are few and generally transient users. If non-smoking vapers continue a vaping habit, the known health risks are small, and the 'unknown unknowns' can be addressed if any evidence arises.
 - Comment: Concern about children vaping could be handled by an age restriction on ACT sales, as for purchasers of tobacco and alcohol
- Vaping could undermine smoke free zones that were created in part "to support social change and create a culture where smoking is not considered the norm" (p 4).
 - Comment: Authorities should beware of social engineering, as the recent furore in Western Australia over Bizet's *Carmen* illustrated.
- Vaping might produce relapses in former smokers.
 - Comment: The evidence is clear (and mounting) that vaping helps displace smoking, not to cause it. In Europe where vaping growth has been strong, tobacco consumption continues in decline.
- There may be questions about possible health effects from second hand vaping.
 - Comment: It would be sensible to address any concerns if evidence emerges, not in fear of it possibly emerging. Earlier comments on a sensible interpretation of the precautionary principle are relevant.
 - Comment: E-cigarettes do not steadily emit mist (unlike smoke from a smoldering cigarette). Vapour is only visible briefly as the vaper exhales it (McRobbie *et al*, p 6). In my experience non-vapers have to be very attentive to even notice vapers in a shared space.

- Major tobacco companies are reported to be investing heavily in personal vaporisers as a product line, and may roll out sophisticated marketing strategies.
 - Comment: Good. That is evidence that tobacco is yesterday's product, and that the private interests of 'big tobacco' can increasingly serve the public health interest now being met at public expense. 'Big tobacco' marketing vaping could usefully compete with 'big pharma' marketing its (comparatively ineffective) over-the-counter nicotine replacement therapies.

I. The philosophical question posed by vaping

It may seem odd to leave primary philosophical issues to the last, but they are the most subjective, and the most foreign to regulators' thinking.

In the American remake of *House of Cards*, Kevin Spacey as the newly-appointed US Vice President, Frank Underwood, has taken up his wife's challenge to give up smoking as befits his new office. However his wife catches him vaping.

"You're cheating!", she alleges.

"No I'm not, it's vapour."

"Still," she persists.

"You should try it. It's addiction without the consequences," Frank argues.⁷

This fiction comes very close to the philosophical question implied by nicotine vaping: Is it right for people to risk, or embrace, use of a mind-altering drug that is addictive? The question obviously distresses many anti-smoking campaigners and some public health officials. Should government prevent, or "educate" people away from using drugs for pleasure if there is any risk of addiction or even the slightest possible future health risk? Where do we draw the line? Nicotine? Caffeine? Chocolate?

In the view of this writer, the question was best answered over 150 years ago:

"The sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number is self-protection. That the only purpose for which power can rightfully be exercised over any member of a civilised community against his will is to prevent harm to others. His own good, whether physical or moral, is not a sufficient warrant." John Stuart Mill, *On Liberty*, 1859

J. Answers to Discussion Paper questions

For the reasons traversed above, my answers to the Paper's questions are:

a) Do you support maintaining the current arrangements governing the

⁷ https://www.youtube.com/watch?v=_RijjhMEVhU

promotion and sale of personal vaporisers in the ACT?

- No. All vaporiser and nicotine supplies should be able to be sold under ACT law, thus clarifying consumers' rights to general consumer protection provisions of the law.
- Sales could be subject to an age limit such as applies to alcohol and tobacco if inappropriate choices by children is a concern.

b) What do you see as the benefits of maintaining the current arrangements?

- None.

c) What do you see as the costs of maintaining the current arrangements?

- Consumers and vaping suppliers are denied rights to engage in mutually beneficial trade that does no harm to third parties, for no good reason.
- The discouragement of nicotine vaping crimps uptake of the most promising innovation in the history of the anti-smoking movement to aid quitting and reducing smoking.
- Consumers who access vaping supplies from abroad have unclear protection under Australian consumer law and any rights to protection might be difficult to exercise.
- The consequent costs are more health damage to smokers, inadvertent protection of 'big tobacco's' traditional products and of 'big pharma's' approved nicotine replacement therapies, and unnecessary and costly regulatory and policing costs.

d) What do you see as the risks of maintaining the current arrangements?

- The ACT Government will appear ill informed, behind the emerging evidence on vaping, and regulation-happy.

e) Do you think community education and awareness raising activities would be sufficient to prevent personal vaporiser uptake, particularly by non-smokers, former smokers and young people?

- Rather than being 'sufficient', they are unnecessary.
- On the evidence of the quality of argument and evidence in the Discussion Paper, any 'community education' by the ACT government would lack credibility.
- Where governments and health authorities act in the face of evidence about good policy and good regulation, they damage their broader credibility.

f) Do you support the introduction of restrictions on the sale and promotion of personal vaporisers in the ACT?

- No. It would further raise the costs to consumers of access to the most modern and highest quality vaping technology.

g) What do you see as the benefits of introducing restrictions on the sale and promotion of personal vaporisers in the ACT?

- No valid benefits.
- Regulators might enjoy the expansion of their remit.

h) What do you see as the costs of introducing such restrictions?

- A worsening of the present costs briefly outlined at (c) above.

i) What do you see as the risks or implementation issues of introducing such restrictions?

- Damage to the credibility of the ACT Government.

j) Do you support a ban on the sale of fruit, sweet, confectionery or alcohol flavoured personal vaporisers in the ACT?

- No. Consumers and vaping suppliers would be denied rights to engage in mutually beneficial trade that does no harm to third parties, for no good reason.
- Such flavourings have been used in tobaccos (e.g. port-flavoured tobacco for pipe smokers), and their prohibition to vaping innovators would needlessly restrict the ability to develop satisfying vaping products to assist smokers to quit.
- If the regulator's concern is with the appeal of vaping to children, the maintenance of the same consumer age restrictions as for tobacco sales would be a better-targeted restriction.

k) What do you see as the benefits of banning the sale of flavoured personal vaporisers in the ACT?

- No valid benefits.
- Regulators might enjoy the expansion of their remit.

l) What do you see as the costs of such a ban?

- Exacerbation of the costs enumerated at (c) above.

m) What do you see as the risks or implementation issues of introducing such a ban?

- Damage to the credibility of the ACT Government.

n) Do you support prohibiting personal vaporiser use in smoke-free areas?

- No. Both research and personal experience suggest there is practically zero inconvenience to non-vapers from vaping.
- The ability for tobacco addicts to vape in social situations may help them to quit or cut down smoking.

o) What do you see as the benefits of prohibiting personal vaporiser use in smoke-free areas?

- No valid benefits.
- Regulators might enjoy the expansion of their remit.

p) What do you see as the costs of prohibiting personal vaporiser use in smoke-free areas?

- A worsening of the present costs briefly outlined at (c) above.

q) What do you see as the risks or implementation issues of prohibiting personal vaporiser use in smoke-free areas?

- Damage to the credibility of the ACT Government.

r) Do you support permitting personal vaporiser use in smoke-free areas?

- Yes

s) What do you see as the benefits of permitting personal vaporiser use in smoke-free areas?

- The ability for tobacco addicts to vape in social situations may help them to quit or cut down smoking.
- Permission would remove an unjustifiable regulatory intrusion on individual choice.

t) What do you see as the costs of permitting personal vaporiser use in smoke-free areas?

- None

u) What do you see as the risks or implementation issues of permitting personal vaporiser use in smoke-free areas?

- None

v) Do you believe personal vaporiser use should be permitted in all smoke-free areas or only some? If some, in which areas do you believe the use of personal vaporisers should be permitted and why?

- Permitted in all.

K. Personal background to submission

I am not a smoker, have never vaped, and have no wish to try vaping. I have no financial interests in any of issues traversed in the ACT Paper, beyond the usual ACT resident's interest in not seeing public moneys wasted or perverse regulations enacted.

My general interest in regulation and policy making arises from some 40 years experience as a senior economist and executive in the Commonwealth Treasury, the OECD, the World Bank and the Productivity Commission. My specific interest in vaping and its regulation arose initially from 2 sources:

- Matt Ridley's thought-provoking essays on European policies towards vaping, particularly : [*E-cigarettes are making tobacco obsolete, so why ban them?*](#)

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- Personal exposure while travelling in France in recent years to the many (and rapidly growing number of) shops specializing in selling e-cigarettes, and my benign experience on the receiving end of passive vaping in enclosed restaurants, cafes and bars.

I dislike second-hand cigarette smoke, and warmly supported no-smoking areas in bars and restaurants, on grounds of the 'external costs' in discomfort and dry cleaning bills imposed by smokers on non-smokers. (I remain skeptical that the health costs of passive smoking are significant in most situations. The issue for me is courtesy rather than health.)

I do not support the continued marginalisation and vilification of smokers or vapers in places where they harm no one but themselves – see the artist David Hockney's recent *cri de coeur* cited in the bibliography.

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