

**Written evidence submitted by  
Dr Richard Stevenson, Emergency Medicine Consultant**

**Executive Summary**

- Novel psychoactive substances are cause for a significant number of presentations to Emergency Departments
  - The psychiatric effects of these drugs is probably under-recognised
  - Current enforcement agencies lack the powers & forensic testing capability to police vendors
  - The ease of availability of Novel Psychoactive Substance accounts for their popularity
  - The concern that users of Novel Psychoactive Substances will turn to conventional controlled drugs is unwarranted; most users already use/have used controlled drugs.
- 
1. I am an Emergency Medicine Consultant, working in Glasgow Royal Infirmary, and sit on the Glasgow Drug Trend Monitoring Group. I liaise closely with drug experts from Police Scotland, and have provided input to the Scottish Government Drugs Policy Unit, Scottish Prison Service, and various medical personnel. I am coordinating a project testing A&E patients for Novel Psychoactive Substances, and have published two papers concerning the subject. I have submitted this written evidence to help provide objective evidence of the harms associated with Novel Psychoactive Substances; the opinions expressed are my own.
  2. As an Emergency Medicine clinician, I have had first-hand experience in treating persons who have used a plethora of Novel Psychoactive Substances. Whilst there are close to five hundred substances reported to the European Monitoring Centre for Drugs and Drug Addiction, it would appear that a select group of chemicals are responsible for such Emergency Department attendances; once a substance is subject to the Misuse of Drugs Act legislation, then such attendances diminish, only to be replaced by an uncontrolled substance.
  3. Users of Novel Psychoactive Substances form a diverse population; I have personally treated young people aged twelve, to fifty-five year olds who have been poisoned by consuming these drugs. In addition to 'recreational' use, patients report being addicted to certain agents, for example ethylphenidate, or etizolam; in the Lothian region of Scotland, patients who were stable on opiate-substitution programs (methadone) rapidly became addicted to ethylphenidate, and discontinued their methadone treatment due to the overwhelming craving for this new drug.
  4. The medical complications encountered by users of Novel Psychoactive Substances often prove challenging to clinicians. Common themes have emerged relating to direct drug toxicity, psychiatric effects, injuries resulting from behaviours whilst intoxicated, extensive tissue damage from injecting, and insufflation of products, drug-withdrawal states and addiction.
  5. The potency of some of the drugs is of great concern; for example, a patient ingested 1/6<sup>th</sup> of a teaspoon of pure synthetic cannabinoid powder. This patient was in a dissociative coma for over 20 hours.

6. User of Novel Psychoactive Substances are 'self-medicating' in an attempt to reduce the unwanted side effects of these drugs. Common scenarios are the use of potent sedative drugs to combat the anxiety, paranoia, and insomnia associated with stimulant compounds.
7. The ease of availability is one of the biggest appeals to users of Novel Psychoactive Substances. The open selling of various substances has contributed to the frequency of harm associated with their use. 'Head Shops' (premises that sell products associated with drug use for example bong, cannabis leaf grinders) are often the main vendors of such drugs, and may offer loyalty cards (buy four get one free); patients have also reported fast food outlets, newsagents, corner shops, and flea markets as alternative sources of Novel Psychoactive Substances, and may offer free samples. Once a drug is controlled under the Misuse of Drugs Act, owners often sell off the product at a greatly reduced price.
8. The marketing of Novel Psychoactive Substances has been particularly targeted at young persons, and young adults. Brand names such as 'Clockwork Orange, Red Exodus, and Psyclone' with brightly coloured packaging are frequently encountered. The composition of certain products to mimic controlled substances is particularly effective; for example most stimulant novel psychoactive drugs do not numb the nose or gums, but may act similarly to cocaine. The local anaesthetic agent benzocaine (often bought in bulk by suppliers) will act to numb the mucous membranes like cocaine, and as such is mixed with drugs such as ethylphenidate, or methiopropamine (both stimulants) to make a product akin to cocaine (often given names alluding to cocaine e.g. china white, snow, gogaine).
9. The impact of certain Novel Psychoactive Substances (predominantly the synthetic cannabinoids), on mental health is probably greatly underestimated. The cost, and technical difficulties in analysing for these compounds negates their routine testing, however they are responsible for often severe mental health presentations in the acute setting. The precipitation of behavioural emergencies, and drug-induced psychoses often leads to multi-agency involvement, with the police, Emergency Departments, and mental health units struggling to contain such individuals with considerable risk to both the patient, and care-providers.
10. The phenomenon of 'excited delirium', or behavioural emergency has caused controversy over the years in the United States; examples of such extreme reactions are occurring within the United Kingdom. Whilst the nature, and definition is currently being debated by academics, its existence cannot be denied; the recognition and management of such behaviour has been taught to police forces, however the medical community has failed to provide adequate support to manage such cases. NHS Scotland is finalising a recognition and treatment strategy for such behavioural emergencies; the underpinning message is that this is a medical emergency (as opposed to a psychiatric state), and prompt transfer to an Emergency Department is vital to reduce morbidity, and mortality associated with this extreme physiological response.
11. Staff of the Prison Service have reported detainees who appear under the influence of drugs, however their urine screenings test negative for controlled substances. Samples of products (synthetic cannabinoids) have been found in prisons and these drugs will not be detected by 'sniffer dogs.'
12. There is a huge market for novel benzodiazepine drugs; these drugs have the same pharmacological actions as prescription drugs (e.g. diazepam, temazepam), but are far more

potent. Consumers have reported considerable tolerance to their effects, often entering a withdrawal state when their preferred product is unavailable. Users of such high doses of benzodiazepines will be at risk of withdrawal seizures which, if untreated may prove fatal.

13. Traditional harm reduction messages, often targeted at the night-time economy are ineffectual to most consumers of Novel Psychoactive Substances. Education of young people, from the ages of twelve, possibly even younger is necessary. Whilst some patients present after consuming only one substance (predominantly the synthetic cannabinoids), severe poisonings result from the intentional consumption of several drugs, often with great quantities of cheap alcohol at private dwelling parties. The 'London-centric' view by most researchers does not address the diverse user-group throughout the United Kingdom.
14. Enforcement of the new legislation may prove challenging; proof of harm associated with a drug labelled as Novel Psychoactive Substance is often lacking. Toxicological data is scant at best, relying on case-reports, and studies of drugs that have similar chemical properties. It is rare to find a single agent present in post-mortem toxicology, and death certificates are often completed with the nebulous term "may be implicated." Trading Standards staff do not currently have the staffing, nor forensic backup/resources for testing to allow prosecution of vendors.
15. Given that there are no presumptive testing kits, and the requirement for an international standard for purity testing of a substance thought to be marketed for drug consumption, the enforcement of possession of a Novel Psychoactive Substance may be challenging for the Crown Prosecution Service to complete such cases. At present, the prosecution of vendors has not been pursued in a court due to difficulties in obtaining expert witness testimony as to the harmful nature of the drugs.
16. The police are lacking powers to charge people with possession, possession-with-intent-to-supply, and other drugs offences. Organised criminal activity concerned with the supply and distribution of Novel Psychoactive Substances can generate large amounts of income, with little risk to the individual. Intelligence from Police authorities indicate that some compounds are being sold on the street as cocaine or ecstasy.
17. Concerns that users of Novel Psychoactive Substances will shift to controlled substances is probably unfounded; nearly all users of Novel Psychoactive have used, or continue to use substances controlled under the Misuse of Drugs Act legislation.
18. To conclude, I personally welcome the introduction of the ban on new drugs. Without question, the easy of availability to purchase such drugs has led to an increase in the harms associated with the use of such compounds.

**Dr Richard Stevenson**