# PRISON SERVICE OURRINAL September 2015 No 221



## Special Edition Reducing Prison Violence

## Violence, Aggression and Agitation — What part do New Psychoactive Substances play?

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#### A psychoactive substance is a chemical or drug that when taken acts primarily on the central nervous system resulting in temporary changes in perception, mood, consciousness and behaviour.

Between the early1980s and late 1990s there was a significant increase in reported illicit drug use in the UK. Following a period of stability, since 2000 there has been a gradual decline in all drug taking ranging from heroin to cannabis. The period since 2008, however has seen what appears to be a significant increase, in both interest and use, of a new range of psychoactive substances.<sup>1</sup>

#### What are New Psychoactive Substances?

Novel or new psychoactive substances (NPS) are essentially drugs, naturally occurring or synthesised from patented substances, which are designed to replicate the effects of illegal drugs. People often misleadingly refer to these drugs as 'legal highs'. However, in 2013-14, nearly 20 percent of 'legal high' samples collected by the Home Office forensic early warning system were actually controlled drugs.<sup>2</sup> NPS are also known as research chemicals, club or designer drugs and are now increasingly coming under the control of the Misuse of Drugs Act 1971. Manufacturers try to circumvent the legal and marketing drug controls by labelling products 'not for human consumption', and NPS are often sold as plant food, bath salts, cleaning solutions or incense with 'risk of harm if consumed' written on the product packaging. The recent Global Drug Survey<sup>3</sup> found that the majority of people using NPS buy online or purchase from friends, dealers or head shops (specialist outlets supplying NPS).

Media attention is often devoted towards announcements that significant numbers of 'new drugs' have been identified. In total, over 300 NPS had been identified by member states of the European Monitoring Centre for Drug and Drug Addiction (EMCDDA) by mid-2013.<sup>4</sup> It appears that, 'the world is witnessing an alarming new drug problem... NPS are proliferating at an unprecedented rate and posing significant public health challenges'.<sup>5</sup>

#### How prevalent is NPS?

Evidence from national surveys in the UK describe the use of NPS amongst the general adult population as relatively low compared with the use of other illicit drugs. However, use amongst younger age groups and some other sub-sections of the population is higher. The most robust estimates of NPS use from the national crime surveys 2012-2013 report that, in Scotland, 0.5 per cent of all adults had tried any NPS with mephedrone being the most common.<sup>6</sup> In England and Wales, 0.6 per cent had taken mephedrone, 2.3 per cent nitrous oxide and 0.5 per cent salvia<sup>7</sup>. In Northern Ireland, in 2010-2011, Mephedrone and 'NPS' was 0.2 per cent and 3.5 per cent respectively amongst all adults.<sup>8</sup>

The prevalence of NPS use in prisons is not currently known. In 2014, the Chief Inspector of Prisons for England and Wales reported that, *'the increased availability in prison of NPS was a source of debt and associated bullying and a threat to health'*.<sup>9</sup> The Chief Inspector concluded that whilst 'Spice' (a synthetic cannabinoid) in prisons may not be widespread it can have consequences for all security of the prison and the safety of other prisoners as well as potential damage to

<sup>1.</sup> Not for human consumption: An updated and amended status report on new psychoactive substances and 'club drugs' in the UK. Drugscope 2015.

<sup>2.</sup> Annual report on the Home Office Forensic Early Warning System (FEWS). A system to identify NPS in the UK. Home Office, 2014.

<sup>3.</sup> www.globaldrugsurvey.com

<sup>4.</sup> EMCDDA – Europol 2013 Annual Report on the implementation of Council Decision 2005/387/JHA.

<sup>5.</sup> www.unodc.org/documents/scientific/NPS\_leaflet\_E.pdf

<sup>6.</sup> NPS – Evidence review. Scottish Government Social Research 2014.

<sup>7.</sup> NPS in England – A review of the evidence. Home Office 2014.

<sup>8.</sup> Drug use in Ireland and Northern Ireland: Drug Prevalence Survey 2010/11. National Advisory Committee on Drugs & Public Health Information and Research Branch 2012.

<sup>9.</sup> HM Chief Inspector of Prisons for England and Wales Annual Report 2013-2014.

the users health. Spice and Black Mamba (another synthetic cannabinoid) were cited as causes for concern in 14 (37 per cent) of the adult male prisons inspected, highlighting the need for staff and prisoners to be given accurate and up to date information on the acute health dangers associated with NPS.

As well as health dangers, it is also recommended that data be gathered to evidence the actual incidence of NPS use in prisons rather than rely on perceived use. The apparent perceived epidemic of NPS use may in fact not be the case but may have become a 'constructed social norm'. A social norm is a cultural product that 'represents individuals' basic knowledge of what others do and what others think they should be doing'.<sup>10</sup> Social norms have two dimensions: how much a behaviour happens, and how much the group approves of that behaviour.<sup>11</sup> Therefore, people may

be less likely to want to take NPS if they believe the majority of their peer group are not taking it and don't think it is acceptable to do so. An ongoing study in one prison aims to test this concept and has found, as predicted, that the rate of selfreported use was lower than the perceived rate of use by other prisoners. This study will social evaluate а norms campaign to promote this view in the hope of discouraging NPS use. There may be many lessons to learn from this approach.

#### What are the effects of taking NPS?

NPS use carries serious health risks. Many NPS contain chemicals that are harmful or toxic. Users are never certain what they are taking and what the effects might be. A pill or powder that looks like one taken previously may in fact contain different chemicals and be much stronger. Risks are increased if multiple NPS are consumed.

Negative physical effects of taking synthetic cannabis such as Spice include fast and irregular heart rate, decreased blood pressure, dizziness, loss of consciousness as well as vomiting, seizures and loss of motor control. Psychological effects can include paranoia, psychosis, increased anxiety and hallucinations.

Professor John Huffman, who first synthesised many of the cannabinoids used in synthetic cannabis for pain management research, describes these

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substances as very dangerous drugs. He says, 'It's like playing Russian roulette. You don't know what it's going to do to you'.

Most of the effects of NPS fit into one of the following six groups (common slang in brackets):

- Stimulants (uppers) increase alertness in the brain and mimic substances such as amphetamine, cocaine, ecstasy and these NPS include BZP, mephedrone, MPDV, NRG-1, Benzo Fury, MDAI and ethyphenidate
- Depressants (downers) sedative type drugs that can feel like tranquilisers that inhibit and relax brain activity mimicking various sedating, antianxiety opioid like drugs. These NPS include pyrazolam, flubromazepam and nitrous oxide.
- □ Hallucinogens (trips) can cause hallucinations (auditory, visual and tactile) leading to either

feelings of happiness and relaxation, or, on a bad trip, agitation and confusion. These drugs mimic substances like LSD and include NPS such as 25i-NBOMe, Bromo-Cragonfly and metoxetamine (similar to ketamine)

□ Dissociative (spaced out) — induce feelings of being detached, as if the mind and the body have been separated, with some people feeling incapable of moving. These drugs mimic substances such as PCP, katamine, DXM and can cause hallucinations and have both a

stimulant and depressant effect. Examples include diphenidine and methoxphenidine

- Opioids (painkillers) these mimic the effects of opiates such as morphine and heroin. Synthetic morphine (AH-7921) and O-desmethy Tramadol (an opiate analgesic) are examples
- □ Synthetic Cannabis (Spice) designed to mimic the active chemical Tetrahydrocannabinol (THC) found in Cannabis frequently used in prisons and traded under such names as Spice, Clockwork Orange, Black Mamba and Exodus Damnation all commonly referred to as 'spice' in prisons. These substances could be included in the downer-type drugs with psychedelic effects but are worthy of a separate category because of perceptions of use and incidence in prisons.

This list shows that NPS drugs can take many different forms and have very different effects. A user, taking an unlabelled white powder, does not know if

R.D. Cialdini (2003) 'crafting normative messages to protect the environment'. *Current Directions in Psychological Science*, *12(4)*, *105-109*.
J. Jackson (1965) 'Structural characteristics of norms'. In I.D. Steiner & M. Fishbein (eds), Current studies in social psychology (pp.301-309).

the drug they are taking is a stimulant, hallucinogen or cannabinoid. Hence, a user who is expecting the effect of cannabis may feel alarm and agitation if they experience instead the effects of a stimulant or hallucinogen.

The effects of NPS vary throughout the experience following ingestion to withdrawal and from person to person. However, the growing body of clinical evidence demonstrates that taking NPS causes acute and persistent health risks that can include agitation, aggression and violence.

#### Does NPS cause violence?

The media often promote a recurring theme that NPS incites users to act violently. Is this myth or a reality?

Drugs and violence have been described as being related possible in three ways: economically, systemically and psychopharmacologically.<sup>12</sup> The economic model suggests that some drug users engage in economically orientated violence such as robbery in order to support the costs of using drugs. The systemic model describes violence as being intrinsically involved with drug use as part of the traditionally aggressive patterns of interaction within the system of drug distribution (turf wars) and enforcing 'hierarchical' codes associated

with the drug or group culture. These models will be addressed elsewhere in this journal. This article concentrates exclusively on the psychopharmacological effects.

The psychopharmacological model suggests that some individuals, as a result of taking substances, may become excitable, irrational, aggressive, agitated and even violent. The EMCDDA reports illicit drug use (acute and chronic), particularly the use of stimulants, as potentially leading to violence or crime by exacerbating existing psychopathological and social problems or by increasing the risk of paranoid or psychotic episodes. There is however a general lack of credible evidence related to psychopharmacology and violence. A study of mephedrone use in South Wales<sup>13</sup> found over 40 per cent of the sample reporting acting violently whilst under the influence of mephedrone, many in combination with other drugs (including for half of the

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women surveyed). There were four distinct links to violence identified: when high; associated with comedown; economic compulsion; and systemic involving the purchase and dealing in mephedrone. Exploring specifically violence when 'high', some mephedrone users became involved in what seems like random acts of violence, often becoming easily and instantly enraged in response to the most trivial triggers. Paranoia was frequently used to explain their involvement in acts of violence, such as believing the people around them (friends, acquaintances or strangers) were talking about them or planning to harm them. Users also reported acts of violence against their partners and family members. Many had no recollection of being violent and they became aware of their actions

by the police after arrest. Aggression and violence during the 'high' or the 'comedown' aspects of mephedrone use were difficult to disentangle. Other studies have also reported that the irritability associated with the withdrawal syndrome from opiates and other drugs may lead to agitation and sometimes violence.

Evidence of the psychopharmacological link between other NPS use and violence is generally sparse despite numerous anecdotes. This is not to suggest there are no links, but rather that there are have been few credible studies to consider the issues.

It is assumed that many people in everyday life quickly suppress unacceptable impulses related to becoming violent. NPS may appear to trigger psychopharmacological mechanisms that inhibit the neurobehavioural systems which under normal circumstances control violence. Further research is needed to better understand if the strength of the violent impulse increases or the control mechanisms decline when under the influence of NPS. More also needed research is to disentangle psychopharmacological from potential economic or systemic causes. All this and having to 'control' for alternative individual level causal explanations such as hormonal influences, genetic factors, variations in substance metabolism rates and intoxication decay. psychological functioning, co-current alcohol and other drug use, gender differences and illicit drug dosage makes this type of research very difficult.

13. Fiona Brookman (2014) The links between mephedrone use, violence and other harms in South Wales. University of South Wales.

<sup>12.</sup> P J Goldstein (1985) 'The Drugs/Violence nexus: a tripartite conceptual framework. Journal of Drug Issues, v.39, 143-174.

It is therefore difficult to conclude that NPS use causes violence psychopharmacologically but we do know that some NPS users, like alcohol use, whilst intoxicated have the propensity to become violent.

#### Is NPS and violence experienced in other countries? — The phenomena of Excited Delirium, Agitated Chaotic Events and Excited Delirium Syndrome

Robust evidence that attributes NPS and violence to psychopharmacological mechanisms is limited, but plenty of anecdotal reports exist. A potentially relevant development worthy of further exploration is a condition being reported in North America called

Excited Delirium (ED), also known as agitated delirium. This condition or state manifests as a combination of delirium. psychomotor agitation, anxiety, hallucinations, speech disturbances, disorientation, violent and bizarre behaviour, insensitivity to pain, elevated bodv temperature and 'superhuman' strength or endurance.<sup>14</sup> Behaviours such as profuse sweating due to hyperthermia, removing clothes, dilated pupils, skin discolouration, hyperactivity, uncontrollable shaking or shivering, and respiratory distress ('I can't breathe') have also been reported. Several

psychological symptoms have also been observed like intense paranoia, panic, extreme agitation, emotional changes, disorientated about time/places and purpose, hallucinations, delusions, scattered ideas and psychosis. Accompanying communication cues include screaming for no apparent reason, pressured, loud and incoherent speech, grunting, guttural sounds, talking to imaginary people and irrational speech. ED has been recognised to occur with NPS use, as well as certain types of mental illness and their associated treatment medications but this is not to say that NPS use causes ED; links between the two are still hotly debated.

Situations where these behaviours are seen are termed Agitated Chaotic Event s (ACE). Some instances of death have been reported during ACEs as the result of a combination of factors many attributed to NPS.

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Where this occurs, the cause of death can be defined as Excited Delirium Syndrome (ExDS). About 250 people per annum are reported to have died in the USA from ExDS, (between 8–14 per cent of those who experience ED). Many of these deaths were in police custody. Deaths from ExDS have also been linked with the use of physical control restraint measures (usually reported in police custody) including positional asphyxia, transitional restraint, noxious chemical control (such as 'Mace' spray) and deployment of conducted electrical weapons (Tasers).

### What can be done to respond to NPS use in Prisons?

Organisations are responding to NPS and associated harms in three main ways: Prevention (trying to persuade people not to take NPS in the first place), Treatment (for users including when intoxicated) and Enforcement (legal controls and sanctions to reduce supply).

#### Prevention

Evidence shows that building resilience by supporting people in creating opportunities for alternative, healthier life choices and improving skills, decision making and developing social networks helps people to avoid drugs and associated harms or problems.

Accurate, relevant and accessible information should be an integral part of any substance misuse strategy intending to reduce the harm and demand for drugs including NPS. Prevention campaigns should cover three levels: universal, directed at all people; selective, targeting groups at risk of NPS use; and indicated or direct, people who are known to have used or be using.<sup>15</sup> Messages may need to differ depending on who is being targeted. NOMS have embarked on a universal communications campaign for staff, prisoners and visitors which will reinforce key messages associated with the risks posed by NPS. This includes a prison radio campaign and the production of a video for use on reception and induction into prisons. There are opportunities for this campaign and associated materials to be developed for targeted or indicated groups.

<sup>14.</sup> White Paper Report on Excited Delirium Syndrome (2009), American College of Emergency Physicians & JR Grant et al (2009), Excited delirium deaths in custody: past and present. Am. J. Forensic Med Pathol 30 (1): 1-5.

<sup>15.</sup> A.D.Berkowitz 'Social Norms Approach'. www.edc.org/hec/socialnorms/theory.html

#### NPS Interventions and Treatments

Usually interventions and treatments are required following acute toxicity where the effects have caused the person to display challenging behaviours. Three responses are suggested:

#### a) Managing acute toxicity

Guidance on the clinical management of acute and chronic harms of club drugs and NPS (NEPTUNE)<sup>16</sup> describe the wider principles within which treatment and care should be provided. This guidance complements the resources provided by the National Poisons Information Services and its online toxicology database and telephone enquiry services

(TOXBASE) for advice on the clinical assessment and management of acute toxicity. The aim of the guidance is to improve the confidence and competence of clinicians in the detection. assessment and management of the harms associated with the use of NPS. Specific areas addressed include detection/identification, assessment, management and harm reduction.

#### b) Longer term support The Faculty of Addictions Psychiatry report<sup>17</sup> describes

how substance misuse providers need to widen their doors to welcome NPS users as 'core business' and place them on an equal footing with alcohol and opiate treatment. Substance misuse services need to understand and meet the needs of the emerging population of drug users and the different cultural and social context associated with this issue. Services need to be responsive to needs and competent to identify, assess and management people with NPS related problems. This means acquiring new skills and knowledge to particularly address this issue. This should be incorporated into service development plans.

c} Collaborative working between custody and healthcare staff

In the Queen's speech (May 2015) the Government announced that 'new legislation will... ban the new generation of psychoactive substances'.

Where Prison Officers are confronted with challenging behaviours, including excitable or agitated conduct, which may be linked to NPS use, they should wherever possible collaborate with healthcare staff to facilitate a clinical assessment of the prisoner/patient in order to effectively manage the situation.

Assessing risk of harm to self and others is of paramount importance. Where use of force, proportionate to the presenting behaviours, is required in order to remove the person to a place of safety for treatment to begin, consideration should be given to any potential health related conditions that may be

> aggravated by the use of force. Again, collaborating with healthcare staff will minimise any presenting risks.

#### Enforcement

In the Queen's speech (May 2015) the Government announced that 'new legislation will... ban the new generation of psychoactive substances'. The Bill aims to make it an offence to produce, supply, offer to supply, possess with intent to supply, import or export psychoactive substances; that is, any substance intended for human consumption

that is capable of producing a psychoactive effect. Whilst the bill works its way through Parliament there are several initiatives that can be deployed to help restrict the availability of NPS in prisons.

David Blakey produced a report on disrupting the supply of illicit drugs into prisons.<sup>18</sup> He identified various supply routes for drugs into prison such as visitors, over the wall, in the post and parcels, brought in by prisoners and through staff who have been compromised. He advocates sharing good practice, disrupting the use of mobile phones, use of searching and search dogs and enforcing prison rules as a way to disrupt drugs supply. The Prison Drugs Supply Reduction Good Practice Guide also describes interdiction practices that can help stifle availability of NPS in prison and security teams within prisons would be advised to revisit their materials and refresh approaches to stifling availability.

<sup>16.</sup> www.neptune-clincal-guidance.co.uk/

<sup>17.</sup> One new drug a week. Faculty of Addictions Psychiatry, Royal College of Psychiatrists (2014).

<sup>18.</sup> www.drugscope.org.uk/resources/drugscope/documents/pdf/good%20practice/blakeyreport.pdf

Currently, it is a criminal offence to throw a wide range of articles or substances into a prison (including controlled drugs); those NPS not controlled are not covered by this legislation. However, a clause in the Serious Crime Act, expected to come into force later this year, aims to remedy this by making it an offence to throw or project any item over a prison perimeter so that it lands in a prison. This followed reports that NPS was being thrown over the wall or fence of prisons and the police were powerless to take action.

NOMS has recently circulated new guidance to prison governors, which sets out clearly for the first time the enforcement measures available to them to deal with NPS use. Work is also underway to develop an effective test for NPS as part of the Mandatory Drug Testing programme.

#### Conclusion

Only a minority of prisoners who consume NPS will exhibit challenging behaviours as a result of consumption. Nevertheless, this presents a significant problem for staff to manage. It is likely that the drugs of choice in the future will be synthetics rather than plant products, will be very potent and selective in their action and will be marketed very cleverly.<sup>19</sup> The issues related to NPS use are not going to go away.

It is clear that aggression and violence can be a symptom of NPS use for some people. Each user has a unique bio-psycho-social expectation and underlying conditions that interact with NPS creating a truly individual response. More research is needed to understand why violence occurs in some people and not others, in order to better predict and manage difficult situations.

Prison officers have a clear role to maintain safe, decent and secure prisons. To achieve this, when confronted with someone potentially intoxicated from a NPS, there is a responsibility to identify, manage and, where absolutely necessary, restrain a person to enable and facilitate the medical professionals to stabilise and treat the individual.

The approach to addressing NPS related violence in prisons needs to be tri-fold including both prevention, interventions/treatments and enforcement. One single approach deployed in isolation is unlikely to be effective. As new evidence informed practice emerges this should quickly be incorporated into new ways of working.

Whilst it is important that prisoners understand that breaking prison rules leads to sanctions and consequences, we are not going to be able to punish our way out of NPS related problems. Punishment does not change behaviours. Prevention, education and treatment, along with care and support, can better help address NPS related problems. This needs to be incorporated into a collaborative culture in every prison and all staff be supported to feel capable and confident in addressing the issue. Working together, can make a big difference.