



Public Health  
England

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# New psychoactive substances (NPS) in prisons

A toolkit for prison staff

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# Who is this toolkit for?

The increasing use of NPS within secure environments is presenting prison-based staff with a significant set of new challenges. This toolkit supports custodial, healthcare and substance misuse staff by providing information about the extent of NPS use as we currently understand it and about the properties of the various categories of NPS, and by providing advice on how to manage the problem from a clinical, psychosocial and regime perspective.

**What do we  
mean by NPS?**

# What do we mean by NPS?

- NPS, also known as legal highs or research chemicals, continue to present a challenge to treatment services in the community and in prisons
- problematic terminology: often not new, legal or 'high' inducing
- significant variations across the country; regional/local subcultures and micro-cultures
- people may use them for experimental, recreational purposes or if they have become dependent on them
- shifting patterns of use due to variable purity and cost, along with perceptions of legal status and their desired or adverse effects

# The law

# The law

- **January 2015 – MoJ applies a range of measures to address NPS use in prisons**  
[www.gov.uk/government/news/new-crackdown-on-dangerous-legal-highs-in-prison](http://www.gov.uk/government/news/new-crackdown-on-dangerous-legal-highs-in-prison)
- **Serious Crime Act 2015 the new legislation makes it a crime to throw any object into a prison, including NPS**  
[www.legislation.gov.uk/ukpga/2015/9/pdfs/ukpga\\_20150009\\_en.pdf](http://www.legislation.gov.uk/ukpga/2015/9/pdfs/ukpga_20150009_en.pdf)
- **Psychoactive Substances Bill 2015.**  
Queen’s speech “new legislation will... ban the new generation of psychoactive drugs”  
[www.gov.uk/government/collections/psychoactive-substances-bill-2015](http://www.gov.uk/government/collections/psychoactive-substances-bill-2015)
- **local authorities, supported by the police, will continue to use a variety of trading standards and consumer legislation, along with measures to prevent antisocial behaviour and to protect public spaces, in order to address the problem in community settings**

# Categories of NPS



# Categories of NPS

- project NEPTUNE (March 2015) has been developed to improve clinical practice in managing harm resulting from club drugs and NPS use. It divides these drugs into four categories:

**1. Synthetic cannabinoids (SC)**  
include a large number of drugs, the best known and most widely used being Spice and Black Mamba

**2. Depressants**  
include such drugs as GHB (gamma hydroxybutyrate), GBL (gamma butyrolactone) and ketamine, which has dissociative effects in addition to its depressant effects

**3. Stimulants**  
include drugs like MDMA (3,4-methylene-dioxymethamphetamine), better known as ecstasy, and ecstasy variants such as PMA (paramethoxyamphetamine) and PMMA (paramethoxymethamphetamine)

**4. Hallucinogens**  
include drugs such as LSD (lysergic acid diethylamide) and assorted tryptamines and phenethylamines

[www.neptune-clinical-guidance.co.uk](http://www.neptune-clinical-guidance.co.uk)

The current evidence indicates that the majority of NPS circulating in the prison system are synthetic cannabinoids

# Prevalence: anecdotal reports

# Prevalence: anecdotal reports

- **prison staff consistently express concern about high rates of SC use (usually Spice and Black Mamba), including by prisoners without a prior history of drug misuse**
- **healthcare staff report a significant impact on their day-to-day workload as a consequence of dealing with the acute adverse effects of Spice**
- **Nick Hardwick, HM Chief Inspector of Prisons, stated in September 2015 that two-thirds of prisons reported having a “significant issue” with NPS in 2014-15 compared to one-third in 2013-14**

# Prevalence: seizures

# Prevalence: seizures

A recent response to a parliamentary question (209374) reported that seizures of Spice have increased from 15 in 2010 to 430 during the seven months from 1 January to 31 July 2014. During the same period, there were only 21 seizures of ketamine, mephedrone and benzylpiperazine combined

(see table below, [www.gov.uk/government/news/new-crackdown-on-dangerous-legal-highs-in-prison](http://www.gov.uk/government/news/new-crackdown-on-dangerous-legal-highs-in-prison))

	1 Jan 2010 to 31 Dec 2010	1 Jan 2011 to 31 Dec 2011	1 Jan 2012 to 31 Dec 2012	1 Jan 2013 to 31 Dec 2013	1 Jan 2014 to 31 July 2014
Mephedrone	0	0	0	3	2
BZP	0	1	0	0	0
Spice	15	86	133	262	430
Ketamine	1	3	5	2	4
<b>Total</b>	<b>16</b>	<b>90</b>	<b>138</b>	<b>267</b>	<b>436</b>

# Prevalence: seizures (continued)

**Conversely, positive tests for traditional cannabis fell by 59% (from 8.6% to 3.9% positive results) between 2003-04 and 2013-14**

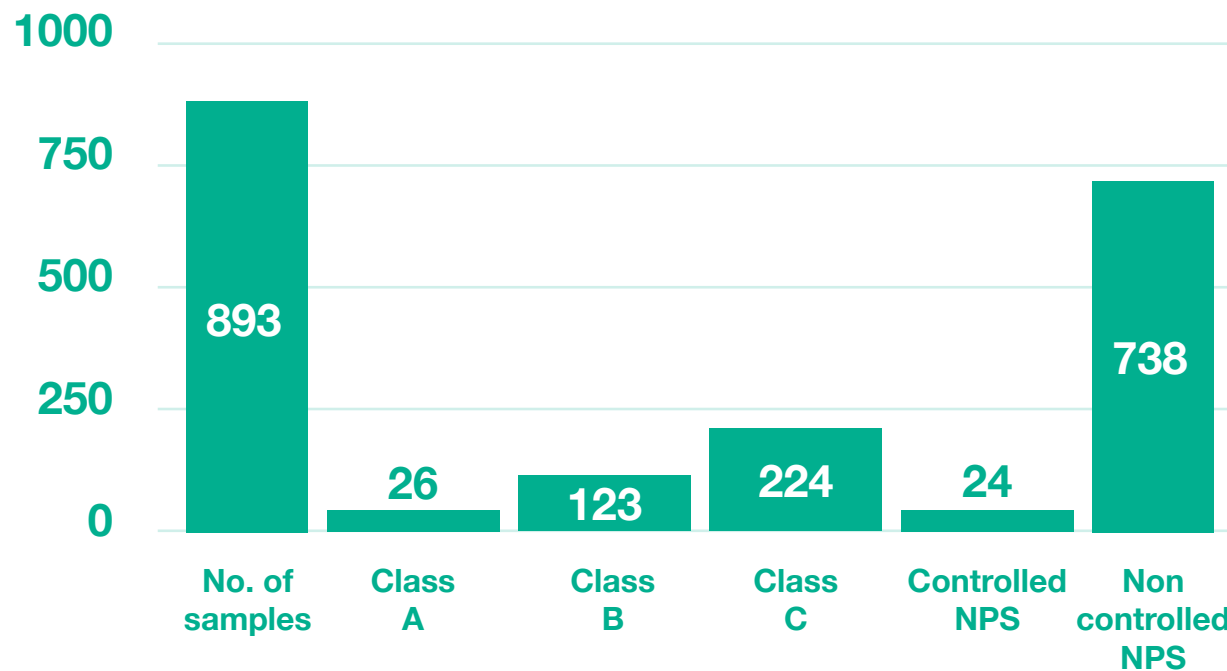
**Centre for Social Justice 2015:**

**[www.centreforsocialjustice.org.uk/UserStorage/pdf/Pdf%20reports/CSJJ3090\\_Drugs\\_in\\_Prison.pdf](http://www.centreforsocialjustice.org.uk/UserStorage/pdf/Pdf%20reports/CSJJ3090_Drugs_in_Prison.pdf)**

**As a result of increasing concerns around the availability and use of NPS in prisons, the Home Office Forensic Early Warning System (FEWS) has undertaken an analysis of seized inbound samples to identify the types of NPS being smuggled into prisons. Of the 893 samples analysed, 762 were found to be NPS. See table overpage**

# Prevalence: seizures (continued)

Samples of drugs seized being brought in to prison



[www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/461333/1280\\_EL\\_FEWS\\_Annual\\_Report\\_2015\\_WEB.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/461333/1280_EL_FEWS_Annual_Report_2015_WEB.pdf)

# Reasons for the popularity of NPS, particularly SC



# Reasons for the popularity of NPS, particularly SC

- undetectable by conventional on-site testing, make time pass more quickly and easier to get hold of
- relative affordability, but emerging evidence that this may be changing
- the unpredictable effects of SC may be an attractive feature of these drugs to some prisoners who wish to experiment or be more adventurous with their drug use
- prior to the Ministry of Justice applying sanctions for NPS possession and use in January 2015, uncertainty in relation to their legal status may have contributed to the popularity of NPS among prisoners

# Challenges for healthcare staff

# Challenges for healthcare staff

- as with all illicit drug use in prison, the covert nature of NPS use, the unpredictable effects of the drugs and the delay in seeking medical help all combine to have a significant impact on healthcare staff
- the adverse effects of NPS in general are discussed in more detail at the end of the toolkit but, in view of the prevailing concerns about SC, we briefly consider some of their adverse effects in this part of the document
- some of the extreme effects of SC (convulsions, bizarre behaviour, temporary paralysis, rapid heart rate, aggression and psychosis) require an immediate response and may require transfer to hospital
- the adverse effects of SC use can be long lasting, and custody and healthcare staff may have to manage the consequences for months following the initial presentation
- some prisoners who use SC may not see themselves as having a problem with their use, so may be reluctant to engage with substance misuse teams or take measures to reduce or discontinue their use of the drugs, but they should be given every encouragement and support to do so
- it may be necessary to withhold prescribed medications where SC use is suspected. Particular caution is required with some antipsychotic drugs but these decisions will need to be made on a case-by-case basis

# Challenges for the wider prison regime

# Challenges for the wider prison regime

- the rapidly increasing prevalence of NPS in prisons is placing additional demands on prison and security staff resources in terms of supply disruption, searching and detection activities
- the need to restrain and control prisoners behaving abnormally or dangerously, or to transfer prisoners to hospital, or to manage long-term challenging or aggressive behaviour, clearly have implications for custodial staff within prisons
- Nick Hardwick, HM Chief Inspector of Prisons, stated in September 2015 that increased use of NPS in prisons would appear to be contributing to rising problems with debt, bullying and violence, and that evidence suggests organised crime groups are supplying NPS to prisons

# Management of NPS in prisons

# Management of NPS in prisons

- establishing accurate data on the prevalence, use and effects of NPS remains crucial to determining successful management of the problems associated with these drugs
- it is essential that every establishment has an integrated response, with custodial, health and psychosocial care staff taking a joint approach to managing all aspects of the problems associated with SC in prisons
- this integrated response is underpinned by a multimedia campaign directed at prisoners and visitors, describing the consequences and sanctions for possessing and using NPS
- the overriding principle is that staff should respond in a proportionate and relevant way to presenting behaviour or symptoms, irrespective of whether prisoners are suspected to be under the influence of NPS

Prison healthcare providers should follow existing PHE guidance that the appropriate response is to address symptoms rather than the specific drug

Where there are questions about prisoners' mental capacity when under the influence of NPS, staff should apply the principles set out in the NHS choices consent to treatment guidance

([www.nhs.uk/Conditions/Consent-to-treatment/Pages/Capacity.aspx](http://www.nhs.uk/Conditions/Consent-to-treatment/Pages/Capacity.aspx))

Issues related to control and restraint are covered by PSO 1600 – Use of force

# Management of NPS in prisons (continued)

- in general, no specific pharmacological treatments exist for the adverse effects of NPS, so symptom-directed supportive care will inform the safe and effective management of acute presentations, underpinned by advice from the National Poisons Information Service and its online toxicology database and telephone enquiry service TOXBASE
- the mainstay of longer-term treatment will be the appropriate clinical and psychosocial support as described in the Project NEPTUNE guidance document. So substance misuse services may need to adapt their current treatment practices in order to better address the needs of people using NPS  
[www.neptune-clinical-guidance.co.uk/wp-content/uploads/2015/03/NEPTUNE-Guidance-March-2015.pdf](http://www.neptune-clinical-guidance.co.uk/wp-content/uploads/2015/03/NEPTUNE-Guidance-March-2015.pdf)



**Drugs: desired effects, users, adverse effects, and managing acute and chronic adverse effects**

# Synthetic cannabinoids

Note that while the evidence indicates SC account for the majority of NPS currently used in prisons, we recognise that the situation is fluid and subject to change and so have included information on the four categories of NPS and club drugs described in Project Neptune

## Class B where classified

### Street names

Annihilation  
Amsterdam Gold  
Spice  
Black Mamba

## Desired effects

Relaxation, euphoria, disinhibition, feeling energised, altered consciousness

## Users/modes of use

**Users:** prisoners, workers subject to drug testing, students, graduates

**Modes of use:** smoked in joints or inhaled through a bong, rarely ingested or snorted

## Adverse effects

**Acute:** convulsions, paralysis, psychosis, extreme bizarre behaviour, tachycardia, aggression

Without rapid urine or blood tests to confirm the use of SC (or other drugs), assessment has to be clinical, based on history where available, and recognising the clinical presentation

**Chronic:** psychosis, aggression

## Treatment

**Acute:** symptom-directed supportive care, may require medication for agitation, convulsions, or psychosis

If symptoms are persistent or severe transfer to hospital may be necessary

**Chronic:** psychosocial and other appropriate support. pharmacotherapy, where appropriate, for enduring symptoms

More  
information  
online

# Depressants

Gamma  
Hydroxybutyrate  
(GBH) Class C

Gamma  
Butyrolactone  
(GBL) Class C

Street names  
Gina Gamma-O  
Blue Verve  
Liquid E  
Liquid Ecstasy

More  
information  
online

## Desired effects

Euphoria, relaxation, increased sociability, increased libido, sexual disinhibition

## Adverse effects

**Acute:** overdose – tolerance does not necessarily confer protection and the risk of coma or death will be increased if taken with other depressant drugs such as alcohol or benzodiazepines. Other acute effects include drowsiness, cardiac, respiratory and gastrointestinal symptoms, hypothermia

**Chronic:** severe dependence

## Users/modes of use

**Users:** clubbers, especially popular with MSM (men who have sex with men), chemsex scene

**Modes of use:** usually orally, mixed with a drink due to its salty taste, occasionally snorted, rarely injected

## Treatment

**Acute:** symptom-directed supportive care, especially respiratory support and airway protection. Symptoms are usually short-lived, but if severe or persistent, transfer to hospital may be necessary

**Chronic:** motivational interviewing, relapse prevention, psychosocial support. Benzodiazepines and baclofen may be used to treat withdrawal symptoms. Acute withdrawal symptoms may be a medical emergency, requiring treatment with barbiturates

# Depressants/dissociative

**Ketamine  
Class B**

**Street names**

**Ket  
Special K  
Kit-Kat, Super K  
Cornflakes**

**More  
information  
online**

## Desired effects

Dissociation, intense detachment (k-hole), perceptual disorders, auditory and visual hallucinations

## Users/modes of use

**Users:** young (20-24), single, unemployed, students clubbers, MSM (men who have sex with men), polydrug users

**Modes of use:** snorted, rarely orally or injected

## Adverse effects

**Acute:** nausea, slurred speech, dizziness, collapse, accidental injury, agitation, tachycardia, visual hallucinations

In the absence of rapid urine or blood tests to confirm the use of ketamine (or other drugs), assessment has to be clinical, based on history, where available, and recognising the clinical presentation

**Chronic:** ulcerative cystitis, k-cramps, psychosis, dependence

## Treatment

**Acute:** symptom-directed supportive care until symptoms, which are usually short lived, resolve

**Chronic:** motivational interviewing, relapse prevention, psychosocial support, bladder monitoring, pain management

# Stimulants

## Mephedrone Class B

### Street names

Bubbles(s)  
Miaow  
Meow-Meow  
Mcat  
Top Cat  
Mad-dog Roxy

More  
information  
online

### Desired effects

“The ego of cocaine and loved-up feeling of ecstasy”, euphoria, elevated mood, reduced hostility, increased sensuality, improved sexual functioning, prolonged sexual performance

### Adverse effects

**Acute:** psychosis, jaw clenching, teeth grinding, tremor, tachycardia, headache, convulsions

In the absence of rapid urine or blood tests to confirm the use of mephedrone (or other drugs), assessment has to be clinical, based on history, where available, and recognising the clinical presentation

**Chronic:** psychosis, depression, anxiety, cognitive impairment, dependence

### Users/modes of use

**Users:** clubbers (especially gay clubbers), polydrug users adding to existing drug repertoire – rationale for polydrug use may be quite sophisticated

**Modes of use:** snorted, can irritate nose and cause nosebleeds. Swallowed (usually in a drink or bombed due to its bad taste), injected

### Treatment

**Acute:** symptom-directed supportive care, managing agitation, convulsions, hypotension, hypertension and rhabdomyolysis in particular

If symptoms are severe or persistent, transfer to hospital may be necessary

**Chronic:** motivational interviewing, relapse prevention, psychosocial support, treat any co-morbid conditions, antipsychotics

# Stimulants

Ecstasy  
(MDMA) Class A

Variants  
(PMA/PMMA)  
Class A

## Street names

E, Molly  
Mandy  
MD

More  
information  
online

## Desired effects

Energy, euphoria, empathy, “loved up”

## Adverse effects

**Acute:** hyperthermia, hyponatraemia (women especially), tachycardia, hypertension, serotonin syndrome, collapse, convulsions, hallucinations, headache, sweating, kidney injury, delayed orgasm, erectile dysfunction

In the absence of rapid urine or blood tests to confirm the use of ecstasy (or other drugs), assessment has to be clinical, based on history, where available, and recognising the clinical presentation

**Chronic:** cognitive impairment, neurotoxicity, depression, increased suicide risk

## Users/modes of use

**Users:** clubbers, young people, students, polydrug users, 95% of time taken with alcohol

**Modes of use:** bombing crystals or powder is most common; also swallowed in tablet form and, rarely, dabbed

## Treatment

**Acute:** symptom-directed supportive care while awaiting transfer to hospital for more specific treatment, such as cooling, management of dehydration and hyponatraemia

**Chronic:** psychosocial support, symptomatic support

Avoid monoamine oxidase inhibitors and selective serotonin reuptake inhibitors

# Hallucinogens

## Lysergamides (Class A)

### Street names

LSD, Acid, A tab, Blotter, Geltabs, Windowpane

## Tryptamines (Class A)

### Street names

Magic mushrooms, Mushies, Shrooms

## Phenethylamines (Class A)

### Street names

Mescaline-Peyote, San Pedro, Peruvian Torch, Bees, Nexus, N-Bomb

More  
information  
online

## Desired effects

Euphoria, mild stimulation, altered sense of time and space, enhanced appreciation of music, visual distortions, intensified sensual or sexual feelings

## Adverse effects

**Acute:** dysphoria, panic, paranoia, tremor, tachycardia, hyperthermia, depersonalisation

In the absence of rapid urine or blood tests to confirm the use of hallucinogens (or other drugs), assessment has to be clinical, based on history, where available, and recognising the clinical presentation

**Chronic:** dependence (rare), flashbacks, persisting perceptual disorder

## Users/modes of use

**Users:** young (16-24), polydrug users, used relatively infrequently

**Modes of use:** orally, sublingually, buccal, rarely snorted

## Treatment

**Acute:** symptom-directed supportive care until symptoms (usually mild and transient) have resolved

**Chronic:** supportive-dependence is rare

# References and further reading



# References and further reading

- **Project NEPTUNE guidance, 2015**  
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