

Protecting and improving the nation's health

# Thematic analysis of training for prison staff on new psychoactive substances

November 2015 to May 2016

## About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

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### Introduction

The use of new psychoactive substances (NPS) in prisons has been recognised as an increasing problem for several years.

The former Chief Inspector of Prisons, Nick Hardwick, reported in September 2015 that two-thirds of prisons had a significant problem with NPS use in 2014/15, compared to one-third the previous year. He also described synthetic cannabinoids (SC), the most commonly used NPS in prisons, as presenting the most serious threat to safety and security in prisons.

The current Chief Inspector of Prisons, Peter Clarke, in this year's annual report, expressed concern about a significant increase in violence in prisons being driven by the use of NPS.

In response to the growing concern over NPS in prisons, Public Health England (PHE), in consultation with colleagues from the National Offender Management Service (NOMS), published a toolkit for prison staff (http://www.nta.nhs.uk/uploads/new-psychoactive-substances-in-prisons[0].pdf) supported by a national training programme. The toolkit and the training were devised to support the management of NPS use in prisons and other secure environments, including young offender institutions and immigration removal centres. The term secure environments (SE) will be used to cover all of these establishments.

The training programme was designed primarily to convey and embed the main messages contained in the toolkit document. However, it also afforded the opportunity to engage with a wide range of prison-based staff and gather their first-hand experience, knowledge and understanding of the impact of NPS within a custodial context. This paper seeks to distil and reflect some of the key themes and learning that emerged from the training programme with a view to supporting and informing frontline staff, prison service managers and policy makers as they address the challenge presented by NPS.

## The training programme

The training programme was primarily targeted at prison-based staff although it benefitted significantly from the attendance and contribution of colleagues from community-based treatment services.

The first of 32 events across England was in Manchester in November 2015. The final event in Birmingham was on 26 May 2016 (coincidentally, the day when the Psychoactive Substances Act 2016 became law).

In order to make the training as interactive as possible and encourage the exchange of information and sharing of good practice, the number of attendees at each event was limited to a maximum of 30. Approximately 650 people attended the 32 events. The discussions with, and feedback from, the participants (and from the facilitators who supported the training) form the basis of this thematic review.

A structured questionnaire (Appendix 2) was used to gather baseline information on the current impact of NPS in the prisons represented. It also provided the basis for an open and interactive discussion with the emphasis on encouraging attendees to reflect and share their experiences of the challenges presented by NPS and some of the strategies that they had developed to manage this. These discussions generated a rich seam of information, including emerging trends in NPS use and the development of good practice. The feedback from these structured discussions provides the basis for the learning and insights that are summarised in this paper.

In addition to the structured questionnaire, all attendees were asked to fill in an evaluation form to assess their perception of the value and quality of the programme. The comments also provided an insight into the practical realities of using and implementing the learning given the day-to-day challenges confronting them in their individual establishments. An analysis of the feedback from the evaluation forms can be found in Appendix 1.

## Feedback from structured questionnaire

Feedback from attendees on the training course endorsed the perception based on seizure data (of drugs within prisons and of drugs being intercepted coming into prisons) and anecdotal reports from both staff and prisoners that synthetic cannabinoids (SC) are, by some distance, the single most used form of NPS in prisons and, in the context of SE, the terms are more or less interchangeable.

#### Why are SC popular in prison?

Attendees identified a range of reasons for the popularity of SC in prisons:

- their undetectability by conventional onsite testing
- their perceived legal status
- their relative affordability, as a replacement for cannabis (even though their effects can be very different from those of traditional forms of cannabis)
- the alleviation of boredom
- a form of self-medication
- a coping mechanism
- pleasure and enjoyment

Some prisoners will continue to use SC even if they are experiencing some negative effects because the pleasure experienced from their use or their ability to cope better with being in prison by using SC will outweigh the negative effects.

Some prisoners will continue to use SC because they are unable to tolerate the withdrawal symptoms when they attempt to reduce or stop the drugs.

#### Prevalence of SC use in prisons

The covert nature of drug taking makes it difficult to establish the exact nature of the prevalence of SC use in prisons.

In general terms, attendees reported that they are not widely used in women's prisons, young offender institutions and immigration removal centres [IRC], but staff in these establishments are aware that this situation may change over time and may be affected by the current reconfiguration of the prison estate.

In male prisons, there is considerable variation between the perceived prevalence of SC use, with staff in some establishments estimating 50% or more of prisoners using SC.

Their use is currently low in high security establishments and appears to vary between open prisons.

#### Negative effects of SC use

These drugs contain a wide range of active chemicals that stimulate the brain's receptors in a variety of ways. Most SC are more potent (some up to 100 times stronger) than natural cannabis and have long half-lives.

Attendees observed that these factors can result in unpredictable, severe and longlasting adverse effects due to their use.

The negative effects of SC use are wide-ranging and can be dramatic for individual prisoners in health and psychological terms and, since the introduction of the Psychoactive Substances Act 2016, criminal justice terms as well.

On an individual level, NPS use is associated with debt, bullying and violence.

At an establishment level, NPS use can have a destabilising influence on the safe and effective functioning of a prison's regime and routine, including an adverse impact on staff morale as a result of responding to the unpredictable and severe effects of NPS use by prisoners.

#### Physical health effects of SC use

A diverse and disturbing range of physical health effects are attributed to NPS use.

Nausea, vomiting, sweating, chest pains, headache, convulsions, bizarre paralysis, fluctuating consciousness, confusion, disorientation, gait disturbance and acute kidney injury are among the more commonly described physical symptoms.

There is emerging evidence of SC causing significant cardiovascular effects such as myocardial infarction and cardiac arrest.

Symptoms and signs, such as levels of consciousness, pulse and blood pressure, may fluctuate wildly even in a matter of minutes, making management difficult and challenging for healthcare and other staff in attendance.

Combinations of symptoms, such as chest pain and paranoia, may make management of an acute situation more difficult.

Determining the precise cause of an individual's presentation may be difficult, attendees said. For example, an individual may have removed their clothes as a form of bizarre

behaviour or in response to extreme sweating (which might, in itself, be a medical emergency).

The general perception is that approximately one quarter of acute presentations may resolve after six hours, but 30% may take up to two weeks to resolve.

Prisoners using SC may lose weight due to the direct effects of the drugs or because they sell their food in order to pay off debts accrued through their SC use.

Some prisoners report withdrawal from SC as being more difficult than withdrawing from opiates and these individuals will need considerable clinical and psychosocial support if they are to reduce or stop their SC use.

There is less clarity regarding longer-term physical effects, but some prisoners seem to develop chronic gastrointestinal symptoms and individuals may develop long-term health effects following severe, acute liver, kidney or cardiovascular damage.

There have been reports of individuals developing faecal and/or urinary incontinence due to their use of SC.

If an individual is suffering from urinary incontinence, it is essential to ask about past, current or future use of ketamine in view of the toxic effects of ketamine on the urinary bladder.

Prisoners may also suffer physical health consequences due to self-inflicted injuries whilst under the influence of SC or because of violence carried out by other prisoners under the influence of SC and because of being subjected to violence due to being in debt.

#### Mental health effects of SC use

Prison staff report that the acute mental health effects of SC use are also manifold and often severe. They include psychosis, hallucinations, bizarre behaviour, agitation, confusion, aggression, amnesia, paranoia, acute self-harm while intoxicated, anxiety and depression. Amnesia may mean that a prisoner has no recall of how he was affected or behaving due to SC use.

In September 2016, the Prisons and Probation Ombudsman (PPO) reported that he had identified 58 deaths in prison, which occurred between June 2013 and January 2016, where the prisoner was known, or strongly suspected, to have been using NPS before their death

Whilst the PPO was careful not to make a causal link between NPS use and these deaths, it is striking that 39 of these deaths were self-inflicted, in some cases involving psychotic episodes potentially linked to NPS use.

Prison staff attending the PHE/NPS Toolkit for Prisons training described prisoners inflicting severe injuries on themselves whilst under the influence of SC, sometimes with fatal consequences.

Longer-term mental health effects of SC use include psychosis and depression and bizarre forms of depersonalisation, with one prisoner describing how 'he had lost his soul'.

The nature and duration of psychotic symptoms present a particular challenge when considering whether or not to initiate antipsychotic medication, further compounded by whether or not release is imminent.

An important feature of withdrawal is severe depression and suicidal ideation.

Staff from one IRC had a policy of putting individuals who had discontinued SC use on a mental health watch for a week, with particular vigilance for suicidal ideation on days three to five after stopping SC use.

#### Debt, bullying and violence

SC were considered to be relatively affordable in prisons, despite costing ten times the community price. However, a number of prisoners had significant problems due to debt from SC use, with a range of potential negative consequences for them and their families.

Prisoners could be subjected to violence due to debt or coerced into inflicting violence on other prisoners, or on staff, in order to clear a debt.

A prisoner replacing an indebted prisoner in his cell might inherit his debt, with all the consequences that this implies.

A prisoner in debt might be forced to test a new or suspected bad batch of SC as a way of settling the debt.

It was commonly reported that prisoners would be given a spiked joint containing SC for purposes of entertaining other prisoners observing their response to smoking the joint.

Generally speaking, more vulnerable or older and frail prisoners would be targeted in this way.

Prisoners would play games, with forfeits or prizes, for the individuals most or least affected by the use of SC.

It is reported that the profitability of dealing in SC has motivated some prisoners to deliberately breach licence conditions so that they are recalled in order to smuggle SC into prisons. There has been at least one incident of a prisoner wielding a knife to defend a 'throw over' of SC, such are the profits that can be made from dealing in SC in prisons.

#### Management of adverse effects of SC use

Feedback from the training suggested that the management of acute and chronic adverse effects of SC use will depend on a number of variables, such as the location of a prison, staffing levels, staff experience, confidence and expertise, and whether or not there is an inpatient healthcare facility, for example.

#### Non-medical management

It is clear that a great deal of low-key management, mainly by prison officers—who are usually the first on the scene—is undertaken to defuse the effects of SC use by individual prisoners or groups of prisoners.

Asking an individual to step in or out of his cell, as appropriate, and giving advice and reassurance in a calm voice will be sufficient to adequately manage many situations. Even if an individual is displaying aggressive behaviour, staff will often take a wait-and-see approach, rather than resorting immediately to control and restraint.

Some prisons have observation cells where a prisoner can be safely accommodated and observed until his symptoms either settle or deteriorate to the point of needing transfer to hospital.

As the training programme progressed, there was increasing recognition of a deescalation approach to acute presentations, with control and restraint being a last resort, even when an individual was agitated or aggressive.

In a similar way, a good deal of management of the chronic effects of SC use was of a non-medical, pastoral nature by a wide range of staff and, on occasions, other prisoners.

#### Medical management of adverse effects of SC use

An important mantra that developed over the course of the training programme was 'treat what you see'.

Prison staff, across all domains, recognised that, rather than focusing on which drug or drugs may have been taken, it was better to clinically manage the presenting symptoms and to treat them, with or without the use of medication, appropriately.

In the vast majority of cases, management was supportive, with medical equipment being used very rarely and medication even more rarely.

Oxygen was frequently used, especially if SC had been mixed with opiates, with naso-pharyngeal tubes and suction devices being used infrequently.

There were occasional descriptions of the use of CPR and defibrillators—indeed as the training programme progressed there were more reports of prisoners suffering from acute cardiac symptoms, albeit in low numbers, due to SC use.

A clear and consistent finding over the six months of the training programme was that sedating medication was virtually never used to manage agitation or aggressive behaviour.

The reluctance to use sedating medication was based partly on not knowing what substances an affected prisoner might have taken and partly in consideration of not being able to reverse or manage any adverse effects of the sedating medication itself.

Having facilities such as an inpatient unit, stabilisation cells and other considerations such as staffing levels, staff competence, the impact of a bad batch and urban or rural locations were all relevant when deciding whether or not to send for an ambulance, as alluded to above.

One prison that adopted the use of the national early warning score (NEWS), to improve monitoring of affected prisoners, did not need to send for an ambulance for affected prisoners in a three-month period following routine use of the NEWS.

A particularly challenging issue, to which there were no clear answers, was the interaction between SC and prescribed medications. In response to this concern, an advisory factsheet about such interactions was circulated by PHE in Spring 2016 (see Appendix 3).

#### Psychosocial management of SC use

The general perception was that psychosocial services were responding in a variety of ways to the challenges posed by SC use.

Initially, there was a sense of not knowing what to do, but, as time progressed, individuals and services adapted existing good, evidence-based practices to better manage individuals using SC.

Identifying an individual's recovery trajectory and responding appropriately is an essential and fundamental requirement in the psychosocial management of SC use.

The FRAMES model (feedback, responsibility, advice, menu of options, empathy, self-efficacy), initially developed as a brief intervention for risky or harmful alcohol consumption, is an effective means of engendering engagement and retaining people in treatment. It can be used in a formal or intuitive way, which makes it particularly effective in the context of managing SC use in prisons.

(http://www.dacas.org.au/Clinical\_Resources/Screening\_and\_Assessment/FRAMES\_-\_Brief\_Intervention\_.aspx)

As some people using SC did not consider their use to be problematic, at the very least they would be provided with harm reduction advice.

Due to the mental health effects of SC use, there was increased collaboration between mental health services, substance misuse services and healthcare services. A consequence of this improved collaboration has been better practice relating to the management of dual diagnosis.

An important harm reduction message, especially in the period prior to release, is to suggest that individuals switch to traditional forms of cannabis once they are released (assuming that they have not suffered from adverse effects due to its use in the past).

A particular attraction for SC users in the community is the relatively low price of cannabis. Someone who has been paying ten times the community price while in prison can more easily afford to use traditional cannabis once they are released.

To underpin this message, practitioners should be aware that 93% of SC users would rather use traditional cannabis and they should inform SC users of the significantly higher risk of experiencing adverse effects and hospitalisation from using SC compared to traditional cannabis.

Attendees endorsed the general perception that, people who use SC in the community are more likely to be homeless and vulnerable, a group which will include many exprisoners.

Consequently, high-quality harm reduction advice at the point of transition from custody to community is absolutely essential, and this advice needs to be maintained by community practitioners and services following release.

#### What's in a name?

Staff attending the training confirmed that the unhelpful term 'legal highs' is slowly dropping out of fashion and usage. In general terms, most prisoners will refer to SC as 'spice' or 'black mamba'.

While it is important to be aware of these terms and to use them to initiate a therapeutic conversation, it is important not to overuse them as this conveys the sense that SC are just one or two uniform or consistent products, when, in reality, there are numerous variations of SC.

SC users need to know that two identical looking packs of a particular brand might contain very different active ingredients, let alone different adulterants as well. There may even be variations within the same packet due to uneven spraying of the SC onto the 'herbs' used to smoke the drug.

#### Effects of SC use on prison regime and routine

Apart from the effects on individual staff members of responding to the acute and chronic effects of SC use, there are systemic consequences on prison regimes to be considered in addition.

Responding to a wide range of adverse acute presentations and dealing with bullying and violence all place a strain on prison staff, in particular custodial staff.

The effects of a bad batch may mean several prisoners needing to be transferred to hospital, with each prisoner requiring an escort of two people.

Staff reported that there have been instances of 11, 12 or 13 prisoners needing transfer to hospital in a single day. This means other prisoners are unable to attend medical appointments or take part in activities like gym, education or workshops.

Apart from the inconvenience and disruption that will occur as a consequence, prisoners affected, through no fault of their own, by such disruption will have an understandable sense of grievance of being deprived of important and meaningful activities. There have been reports of prisons being brought to boiling point by accumulated frustration and grievance in such circumstances.

#### Effects of SC use on prison staff

Attendees observed that some prisoners will continue to use SC, despite experiencing adverse effects, because they are increasingly confident about the capability of prison staff to manage these incidents.

This can be a source of further stress, and demoralisation, for staff repeatedly attending prisoners suffering the acute effects of SC use.

Some prisoners will time their use of SC to coincide with maximum healthcare cover in order to be more confident about the clinical management of any adverse effects that they might experience due to their use.

Staff attending the training events occasionally described suffering symptoms (headache, disorientation, nausea) due to secondary exposure to SC.

Currently, very little is known about the likely short- or long-term impact of secondary exposure to SC, but staff should be advised to take all reasonable precautions to minimise the risk of prolonged exposure.

## Responses to use of synthetic cannabinoids

#### Criminal justice responses

The Psychoactive Substances Act 2016 means that possession and supply of NPS in prisons are criminal offences, with maximum sentences of two and seven years, respectively.

It was conceded that it was important that prisoners are made aware that while personal possession of NPS is not an offence in the community it is within a prison context. However, doubt was expressed as to whether the new legislation would exert a deterrent effect on SC use in prisons.

The availability of improved testing for NPS increases the likelihood of prisoners testing positive for NPS use and, thereby, suffering the criminal justice consequences of a positive test. Given that the non-detectability of SC is thought to have been a strong driver for its increased use in custody, prisoners need to be made aware of developments in testing and the increased risks and sanctions they may face.

Given the historical perceptions that NPS are 'legal highs', it is important that prisoners' relatives are made aware of the potential penalties for conveying NPS, especially as they may be duped or coerced into smuggling NPS into prison on the basis that they are legal.

It is difficult to predict the long-term impact of the Act at this early stage of implementation.

#### Smoke free prisons

The phased introduction of smoke free prisons is not a direct response to the use of NPS but may have an impact on their use, given that SC are generally used by smoking.

The tobacco ban may lead to people using SC by other means (there are already reports of SC being sprayed onto paper in order to be ingested rather than smoked) or switching to other drugs. It will be important to monitor the impact and to reduce the potential for unintended consequences.

#### Supply interruption

At the NPS Toolkit training events, supply interruption was a recurrent theme.

Attendees wanted more support from the police, improved perimeter patrolling, more use of drug dogs, better scanning and other detection and interception processes. There was concern that at a time of increased cost pressures, these wishes were unlikely to be fulfilled.

#### Staff training

More than 600 staff attended the 32 NPS Toolkit training events held between November 2015 and May 2016. Attendees acknowledged the value and need for training, but it should be recognised that there was already a high and improving level of knowledge and competence, across all domains, in the prison service.

Attendees at the training events not only displayed a willingness and ability to learn more about managing NPS in prisons, but also contributed richly to what were very interactive training events.

They also showed an impressive willingness to develop their own coping mechanisms and think creatively in addressing the challenges presented by NPS in general and SC in particular.

#### Peer support and mentorship

At all of the training events, the benefits of using prisoners to provide peer mentorship and support were acknowledged. The role of peer mentorship and support is widely used in the substance misuse field and can be particularly effective in the context of secure environments.

Prisoners wearing T-shirts saying 'Ask me about NPS', prisoners leading group work in psychosocial services and, where individuals were agreeable, describing how they had suffered from the adverse effects of SC use as a means of dissuading other prisoners from using these drugs were just a few of the measures described by attendees at the training events.

#### Awareness campaigns

Using all forms of media to raise awareness of the risks of SC use was another consistent theme at the training events.

Such measures include using prison radio, poster campaigns, leaflets and other promotional materials along with accessing users' forums, which frequently contain postings highlighting the adverse effects of SC use.

#### **Demand reduction**

Apart from increasing awareness of the risks of SC use, it is important to identify proactive measures to reduce the demand for SC both at an individual and collective level.

There was universal agreement that greater access to purposeful activity was the key to diverting prisoners away from drug use. Boredom and a lack of physical and mental stimulation are clearly significant factors that encourage drug use in prison. There was a clear consensus that improving the provision of purposeful activity in some establishments would contribute to reducing the demand for both SC and other drugs.

The User Voice report, Spice: The Bird Killer, (May 2016), (http://www.uservoice.org/wp-content/uploads/2016/05/User-Voice-Spice-The-Bird-Killer-Report-Low-Res.pdf) said: "What we found was not that people were using spice because they were bored but mainly as a coping mechanism and to self-medicate, because the reasons why they are in prison in the first place have gone untreated."

## Conclusion

Feedback from the NPS training programme confirms that SC continue to exert a significant impact on the lives of inmates and staff across the prison estate and represent a challenge to the prison service.

It is also clear that prison staff, across all disciplines, are responding with increasing confidence and competence to this challenge and become more adept at managing acute and chronic adverse effects on an almost daily basis.

The training events identified many examples of good practice to support the clinical and psychosocial management of the problems associated with NPS use. They include:

- establishing a 'recovery circle' with a debriefing session for staff and affected prisoners following an incident relating to the adverse effects of NPS use
- the use of stabilisation cells to observe and monitor affected prisoners rather than sending them straight to hospital
- the availability of grab bags containing medication and equipment for emergency medical use on the wings rather than in healthcare
- drop-in clinics to facilitate opportunistic engagement with psychosocial services
- providing harm reduction advice, as a minimum, for those prisoners unable to engage fully with psychosocial support
- identifying an individual's recovery trajectory and engaging appropriately
- wide-ranging and creative ways to increase awareness of NPS harms among staff and prisoners
- engaging prisoners in supporting education and awareness campaigns

There is increasing evidence of prison staff having formed a therapeutic alliance with prisoners and established successful support groups and networks of peer mentorship and support.

Prisons are a repository of good practice and expertise which should not only be recognised, but emulated and adapted by other services and settings in order to ensure that the best possible care, in terms of prevention and management, is provided to service users not just in prison but also in community and hospital settings.

## Feedback of NPS training from evaluation forms

All the attendees who took part in the training programme were asked to complete an evaluation form at the end of the event. The evaluation forms were collated and analysed. The main findings are summarised below.

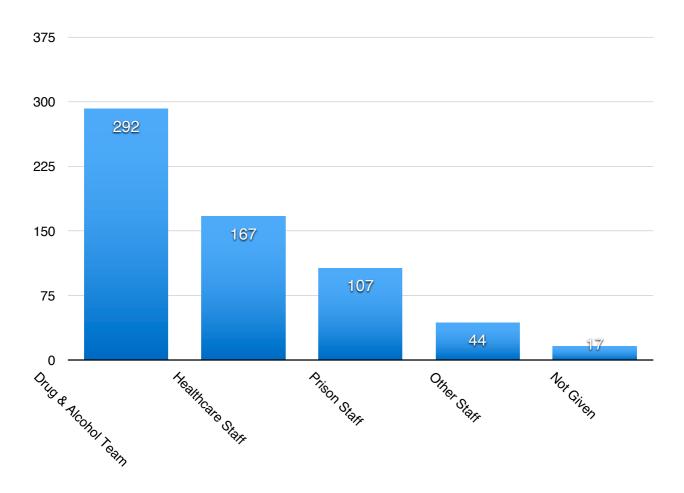
Feedback about the training was overwhelmingly positive, with very high levels of satisfaction (95%). Respondents regarded the approach as relevant (95%), they would be comfortable using the tools (88%) and felt there was clarity over the instructions (78%). Two-thirds (66%) stated that prison senior management would support the training; 92% believed other prison staff would be interested in the training and 83% stated that prisoners would benefit from the toolkit.

Reservations focused on implementation. Few attendees thought that they would have access to the resources or have the capacity to implement the training fully (28%) due to office space and budget (25%) and a lack of preparation time (43%). Staff responses were mixed about whether they felt the prison had sufficient expertise to implement the training. Half of the respondents (50%) believe more follow-up training is needed.

Appendix 1 has a detailed analysis of the feedback from evaluation forms.

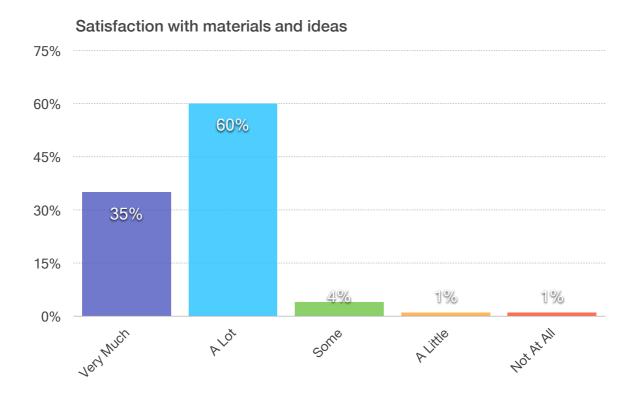
## Appendix 1: Feedback from evaluation forms

Table 1: Staff representation at the NPS training events, n=627



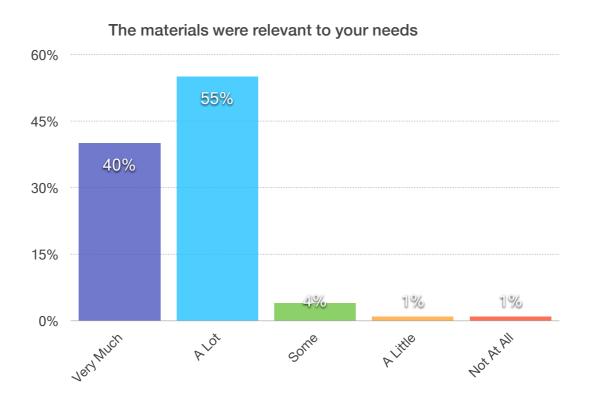
The majority of attendees were from substance misuse teams (47%, n=292) followed by healthcare staff (27%, n=167) and prison staff (17%, n=107)

Table 2: Satisfaction with the materials and ideas presented



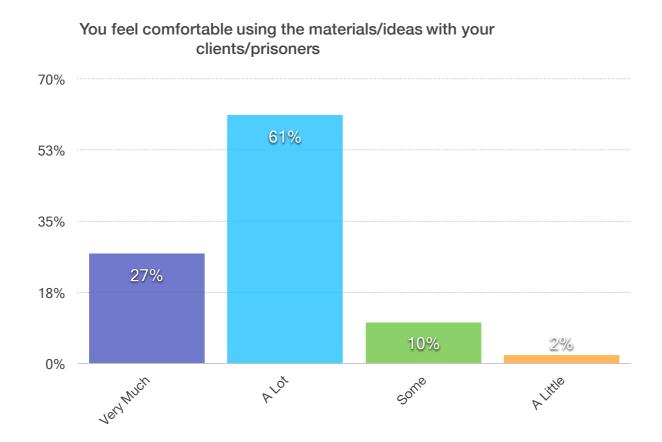
95% of respondents agreed 'very much' or 'a lot' with the statement that they were satisfied with the material and ideas presented

Table 3: The materials were relevant to the needs of the establishment



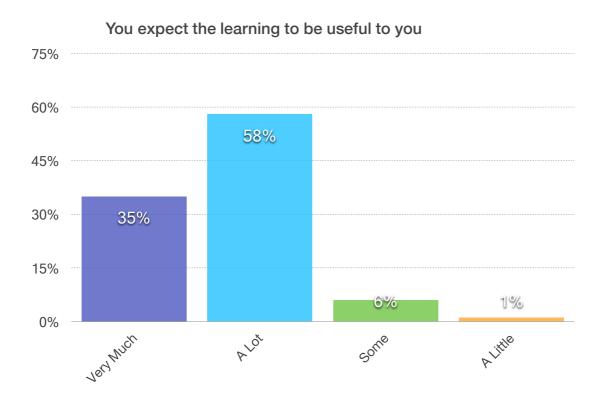
95% of respondents agreed 'very much' or 'a lot' with the statement that the materials were relevant to the establishment or service's needs

Table 4: You feel comfortable using the materials and ideas with your clients/prisoners



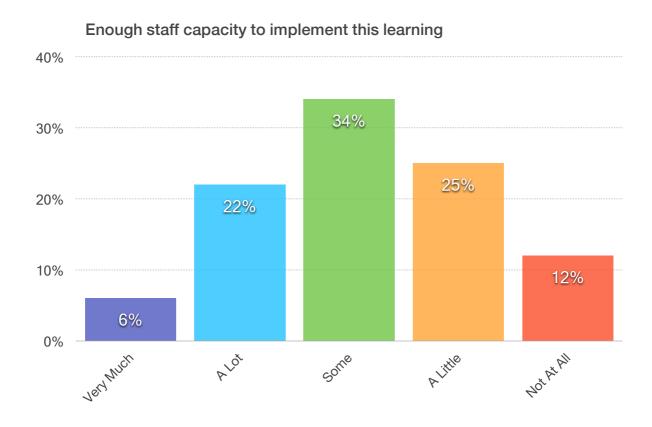
88% of respondents agreed 'very much' or 'a lot' with the statement that "you feel comfortable using the materials/ideas with your clients/prisoners"

Table 5: You expect the learning from the training will be useful to you and your clients/prisoners



93% of respondents agreed 'very much' or 'a lot' with the statement that "you expect the learning from the training to be useful to you and your clients/prisoners".

Table 6: Your establishment has enough staff capacity to implement these ideas and materials

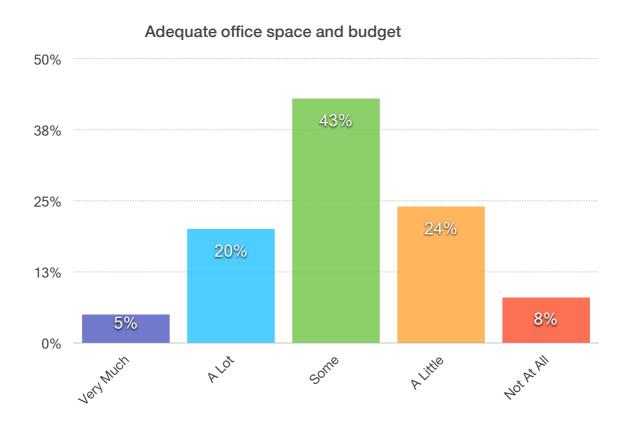


Although there was very high levels of satisfaction with the materials and training presented, only 28% of respondents agreed 'very much' or 'a lot' with the statement that "your establishment has enough staff capacity to implement this learning".

Over one-third (34%) of respondents believed that there was "some" staff capacity to implement these materials.

One-quarter (25%) stated that there would be "a little" capacity and 12% stated that there would be "no" capacity to deliver the required outcomes.

Table 7: Your establishment has adequate office space and budge to implement these ideas and materials

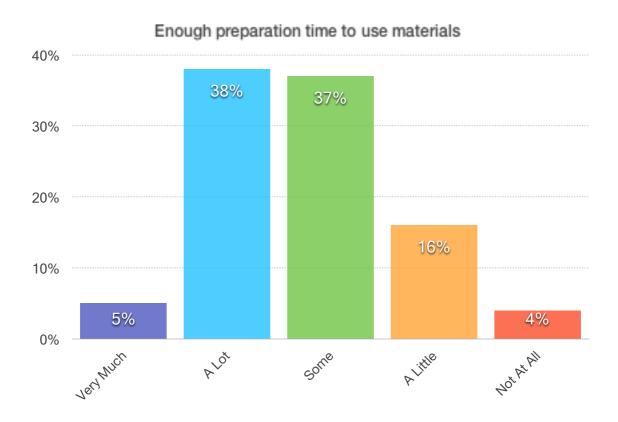


Only 25% of respondents agreed 'very much' or 'a lot' with the statement that "your establishment has adequate office space and budget to implement these materials".

43% of respondents believed that there was "some" staff capacity to implement these materials.

Around one-quarter (24%) stated that there would be "a little" capacity and 8% stated that there would be "no" capacity to deliver the required outcomes.

Table 8: You will have enough preparation time to use these materials

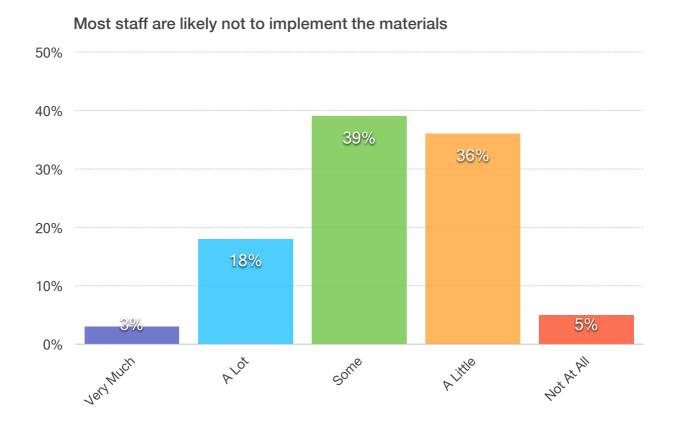


In comparison to resourcing, having preparation time seems less of an issue with 43% agreeing 'very much' or 'a lot' with the statement that "you will have enough preparation time to use these materials".

37% of respondents believed that there was "some" preparation time to implement these materials.

16% stated that there would be "a little" capacity and 4% stated that they would no time to use the materials.

Table 9: Most staff in your establishment are likely NOT to implement these materials effectively



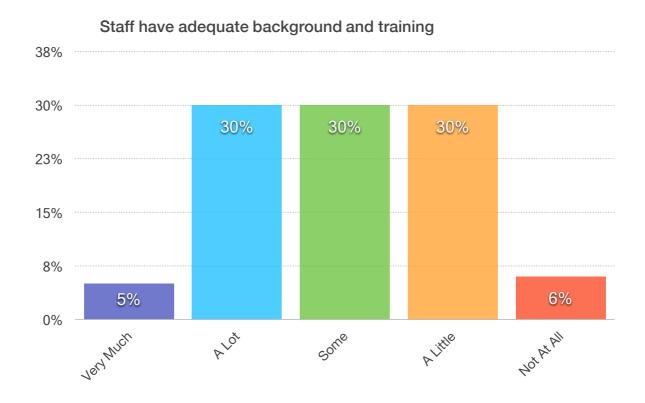
The question reverses the intention and asks whether respondents agree that staff will not be likely to implement these materials effectively.

One-fifth (21%) agree 'very much' or 'a lot' with the statement.

39% of respondents believed that there was "some" staff resistance or incapacity to implement the materials.

36% stated that there would be "a little" staff resistance or incapacity and 5% stated that there would be "no" issues.

Table 10: Staff in your establishment have adequate background and training needed to implement these materials effectively

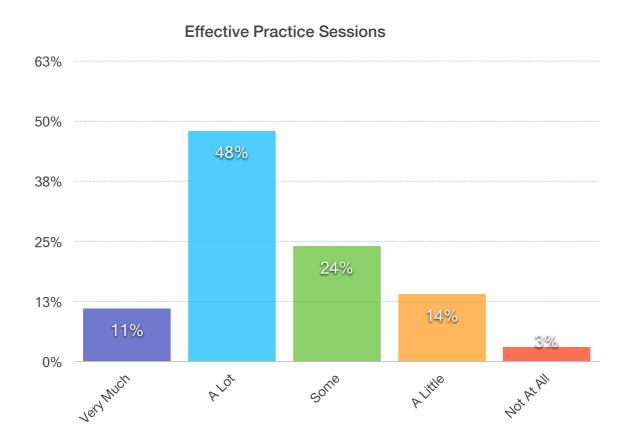


35% agreed 'very much' or 'a lot' with the statement that "staff in your establishment have adequate background and training to use these materials".

30% of respondents believed that there was "some" expertise.

30% stated that there would be "a little"; and 6% stated that there would be "no" expertise to deliver the outcomes require.

Table 11: The training included effective practice sessions that gave you confidence in using the materials



59% agreed 'very much' or 'a lot' with the statement that "the training included effective practice sessions that gave you confidence in using the materials"

24% of respondents believed that there was "some" effective sessions

14% stated that there would be "a little"; and 3% stated that there were be "no" effective practice sessions

Table 12: The training included good instructions and examples for adapting the materials to your client needs

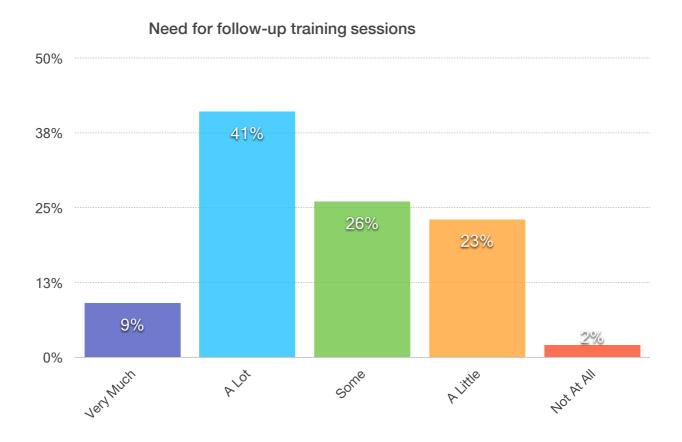


78% agreed 'very much' or 'a lot' with the statement that "the training included good instructions and examples for adapting the materials to your client needs".

14% of respondents believed that there was "some" good instructions and examples.

7% stated that there would be "a little"; and 1% stated that there were "no" good instructions and examples.

Table 13: A follow-up training session will be needed to really use these materials



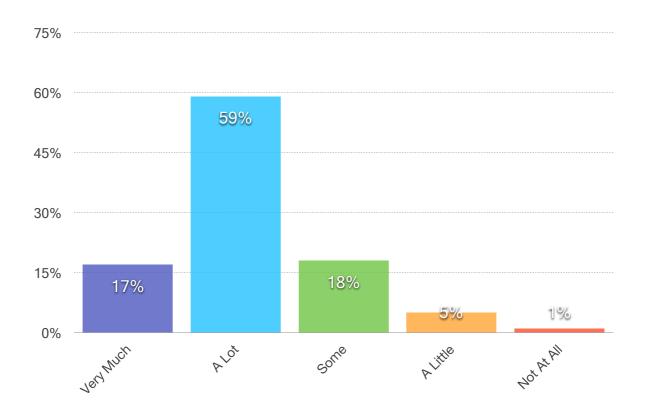
50% agreed 'very much' or 'a lot' with the statement that "follow-up training sessions will be needed to really use these materials".

26% of respondents believed that there was need for "some" additional training.

23% stated that there would be "a little" need; and 2% stated that there was "no" need for "some" additional training.

Table 14: Senior management will support and encourage the use of these materials



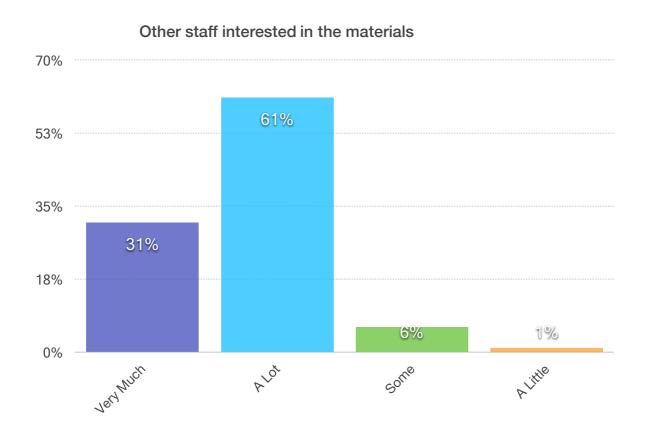


66% stated that senior management within the prisons would support implementation of the materials "very much" or "a lot".

18% stated that there would be "some" support.

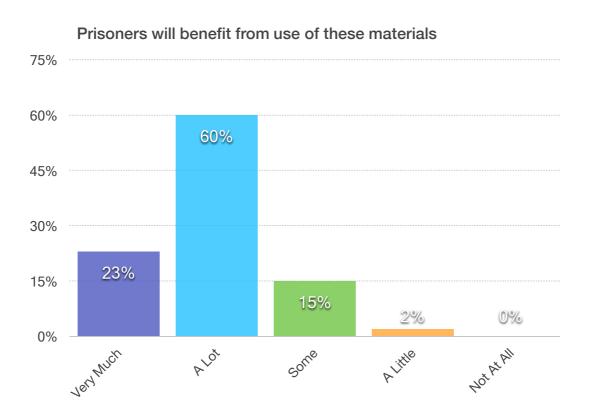
5% "a little" and only 1% suggesting that there would be "no" support offered by senior management with the prison.

Table 15: Other staff at the establishment would be interested in learning to use these materials



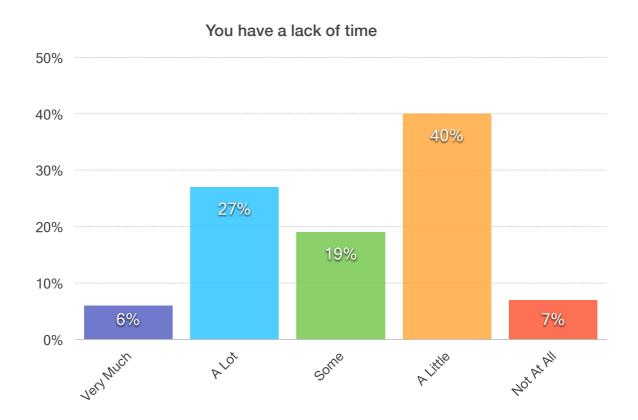
92% stated that other staff within the establishment would be interested in the materials and ideas presented.

Table 16: Prisoners will benefit from your use of these materials



83% stated that prisoners will benefit from the ideas presented as part of the training.

Table 17: You will have a lack of time to implement these materials



One-third (33%) of respondents stated that they will have lack time to implement the training.

40% stated that they will have lack "a little" time and 7% stated that time was no problem in the implementation of the materials.

## Appendix 2: NPS training questionnaire

1. How many incidents of NPS use per week come to the healthcare team's attention?

0-4	5-10	10-20	>20	
Comment:				
2. Profile of NPS using p	orisoners			
Age group?				
Ethnicity?				
History of substance mis	use?			
Comment:				

3. What are the main symptoms associated with NPS use that people present with?
Comment:
4. Are there reports of prisoners being used as guinea pigs to test the effects of NPS, with or without
their knowledge or consent, or for purposes of entertainment or bullying?
Comment:
5. On average, how many times a week is an ambulance called for a prisoner suffering from the
effects of NPS?
Comment:

6. At the time of presentation:	Yes	No	
Are staff usually aware that there has			
been NPS use?			
Only become aware of NPS use post			
incident			
Are prisoners' resistant to intervention?			
Comment:			
7. Dealing with NPS related incidents:			
How often do staff need to employ restrain	t and control methods?		
11	:	-t CDD -t	
How often is the use of emergency medical	intervention i.e. defibrilla	ator, CPR etc. required?	
Comment:			
Comment.			
8. Treatment response:			
How often is a pharmacological intervention	n (e.g. sedation, tranquili	sers) required?	
, , , , , , , , , , , , , , , , , , , ,			
How often do prisoners presenting with NP	S receive structured drug	treatment i.e. clinical or	
psychosocial interventions?	Ö		

If prisoners are offered clinical or psychosocial support, do they engage with this support?"
9. Response of prisoner to NOMS/Healthcare intervention:
Are there commonly short or long term adverse effects associated with NPS use? Yes/No
If yes, please provide details.
10. What measures would staff wish to see introduced to address problems relating to NPS use?
Comment:

## Appendix 3: Interactions between prescribed medications and novel psychoactive substances

In the absence of hard evidence of interactions between prescribed medications and NPS, it is not currently possible to give precise and specific advice about whether to withhold prescribed medication when NPS has been used.

Little is known about the risks of poly-drug use, either of NPS together or NPS with classical recreational drugs, alcohol, over-the-counter (OTC) medicines, or prescription medicines. Any drug combinations should be considered potentially dangerous. [1,2]

Due to the lack of clear information, decisions about continuity of prescribed medicines should be made on a case-by-case basis.

Clear, written protocols are needed that include who may make a decision to omit a dose of medication or to discontinue a medicine altogether, as these decisions will frequently need to be made in the absence of a prescriber. A prescriber should review these decisions as soon as possible.

In general, the nature of the presenting symptoms and signs should be considered alongside the possible effects of an individual's prescribed medication on those symptoms and signs. This is important for medicines that cause drowsiness or affect the central nervous system, for example, hypnotics, anxiolytics, antipsychotics, antidepressants, antiepileptic drugs, drugs for ADHD, analgesics, antihistamines.

Possible side effects of medicines are available in the:

British National Formulary (BNF) <a href="http://www.evidence.nhs.uk/formulary/bnf/current">http://www.evidence.nhs.uk/formulary/bnf/current</a> Summary of Product Characteristics (SPC) <a href="http://www.medicines.org.uk/emc/">http://www.medicines.org.uk/emc/</a>.

Factors to consider when deciding whether to withhold or continue medication include:

- whether or not the facility has an in-patient unit for closer healthcare supervision
- the healthcare workforce availability and capability to assess and follow-up the care
  of the patient

Examples of when treatment might be withheld include:

- if an affected prisoner was showing signs of significant drowsiness it might be necessary to withhold opioid analgesics, opiate substitute treatment or hypnotics
- if an individual presented with a lowered pulse and blood pressure,
   antihypertensives might need to be reduced or discontinued for a period of time

Examples where continuation of critical medicines is more likely to be needed to avoid harm include:

- continuing essential medication, such as insulin or warfarin. Close therapeutic monitoring of the effect of these doses is advised
- given the association between synthetic cannabis use (the more common type of NPS) and convulsions, it would be advisable to continue antiepileptic drugs

#### **Potential interactions**

NPS	Interacting medicine (list not exhaustive)	Potential effect
Ketamine [3]	Ritonavir, cobicistat	Decrease the rate of ketamine clearance and potentiate its toxicity.
	Efavirenz and nevirapine	Decrease in ketamine effects.
Ecstasy, MDPV, PMA, mephedrone, methamphetamine, cocaine, butylone, methylone, phenethylamines, methamphetamine [3]	Monoamine oxidase inhibitors (MAOIs), tricyclic antidepressants, selective serotonin reuptake inhibitors (SSRIs), opiate analgesics, tramadol, OTC cough medicines, antibiotics, weight-loss agents, antiemetics, antimigraine agents.	Increased risk of serotonin syndrome. Some MAOIs have a long half-life (eg phenelzine, tranylcypromine); interactions may still be possible up to 2 weeks after the drug is stopped.
Methamphetamine [3]	Amiodarone, citalopram, codeine, fluoxetine, haloperidol, methadone, paroxetine and valproic acid, cobicistat	Increase the toxicity of methamphetamine.
Mephedrone [3]	Ritonavir, cobicistat	Increase the toxicity of mephedrone.
Ecstasy [3]	Ritonavir, dextromethorphan, fluoxetine, paroxetine, moclobemide, haloperidol, thioridazine, quinidine, cobicistat, elvitegravir, atazanavir, darunavir	Increase the toxicity of Ecstasy.
Synthetic cannabis [4-6]	Antifungals: itraconazole, ketoconazole, fluconazole Macrolide antibiotics: clarithromycin, telithromycin, erythromycin Anti-HIV drugs: indinavir, nelfinavir, ritonavir, saquinavir Antipsychotics: clozapine, quetiapine	These medicines inhibit the liver enzyme CYP3A4 this leads to an increase in plasma level of synthetic cannabis and decreased rate of clearance which potentiates its toxicity.  Concomitant use may cause brain, kidney, liver or heart injury.

#### References

- 1. Bonnici KS, Dargan PI, Wood DM. Novel psychoactive substances or 'legal highs'. British Journal of Hospital Medicine 2015; 76 (9): c130-134.
- 2. Baumeister D, Tojo LM, Tracy DK. Legal highs: staying on top of the flood of novel psychoactive substances. Therapeutic Advances in psychopharmacology 2015; 5 (2): 97-132.

- 3. Abdulrahim D, Bowden-Jones O, on behalf of the NEPTUNE Expert Group. Guidance on the Management of Acute and Chronic Harms of Club Drugs and Novel Psychoactive Substances. Novel Psychoactive Treatment UK Network (NEPTUNE). London, 2015.
- 4. Schifano F, Orsolini L, Papanti DG et al. Novel psychoactive substances of interest for psychiatry. World Psychiatry 2015; 14: 15-26.
- 5. Zawilska JB, Andrzejczak D. Next generation of novel psychoactive substances on the horizon A complex problem to face. Drug and Alcohol Dependence 2015; 157: 1-17.
- 6. Smith CD, Robert S. 'Designer drugs': update on the management of novel psychoactive substance misuse in the acute care setting. Clinical Medicine 2014; 14 (4): 409-15.

Prepared by Katie Smith, East Anglia Medicines Information Service, April 2016.

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