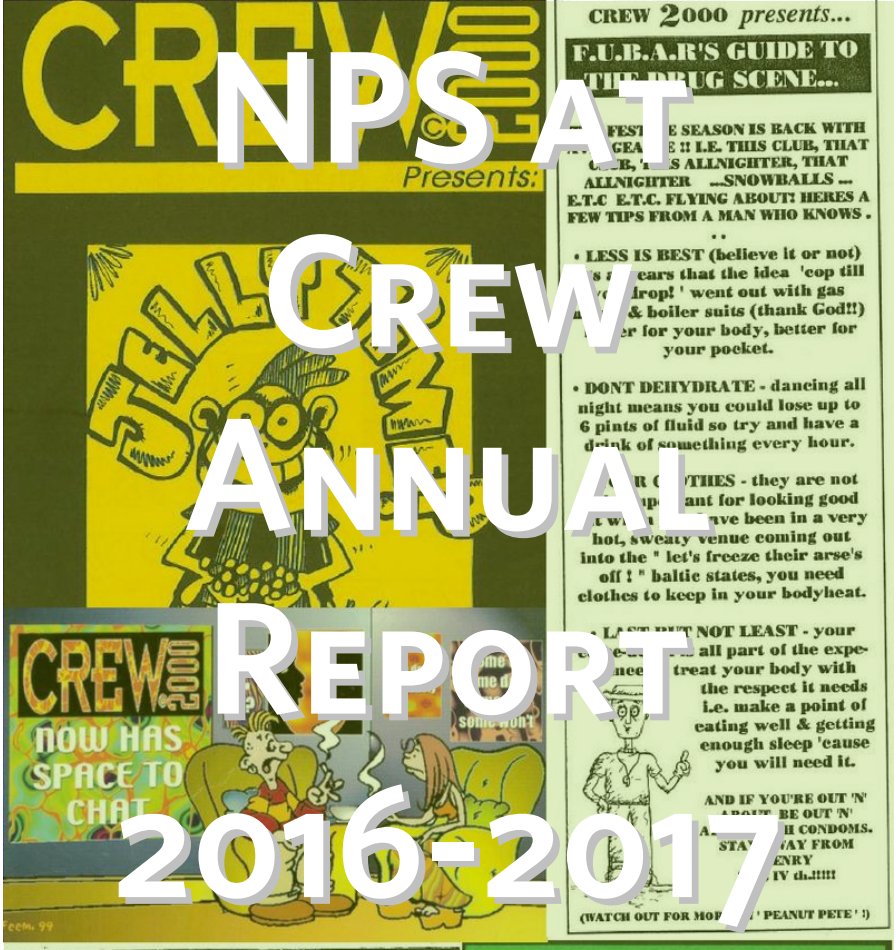
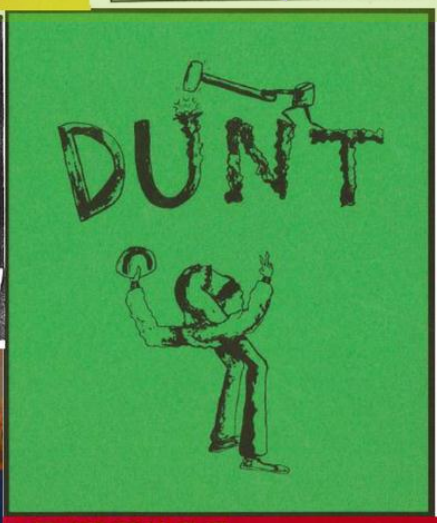
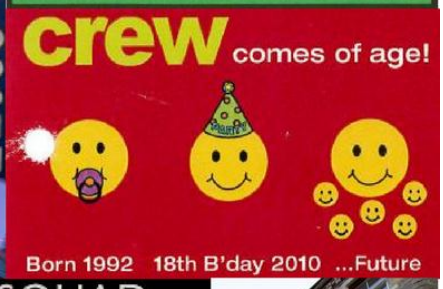
NPS at Crew Annual Report 2016-2017







Crew get real on-line

Crew 2000 started in the early 1990s at a time when the enormous spread of dance drugs took many agencies by surprise. Many of those involved on this scene were young and new to drugs.

Using people's experiences of this scene and passing on their skills and knowledge of controlling drug use onto other young people was necessary, as young people got most of their believable information from friends.

The aim was to encourage values of health and harm reduction amongst users by directly involving them in the production and distribution of relevant and realistic information about recreational drug use. Formed in 1992 as a volunteer-led coalition where volunteers would be invested in with training and experience, Crew 2000 had very limited funding until its Lottery funding last December, which will secure the project until the year 2000!

The Edinburgh-based project offers the following services:

- Drugs Info Shop, open Thursday and Friday 4pm-8pm, Saturday 10am-6pm.
- Drugs advice & information, free condoms and safer sex information.
- Safer Dancing Outreach: providing information, advice and support to people in clubs and at dance events.
- Leaflets: production and distribution of leaflets on drugs and related issues.
- Training: volunteers receive a comprehensive training package throughout their time with the project.

Training packages on drugs awareness and safer dancing, for example, are also offered to groups who work with young people. A course is currently being developed for club/security staff.

Among other services provided by Crew 2000 are surveys of drug trends amongst young people, a drugs awareness consultancy and a World Wide Website. A multimedia drugs database will be available soon on CD-ROM.

The need for credible and empowering information about the risks involved in drug use is as crucial now as it ever was. For further information on training, leaflets or the project contact Liz Skelton, Crew 2000, 32 Cockburn Street, Edinburgh EH1 1PB; and on tel: 0131 220 3404, fax: 0131 220 4446 or e-mail: *crew2000@electricfrog.co.uk*. And don't forget to browse their website at *http://www.electricfrog.co.uk/crew2000/*. ▶

Crew 2000 volunteers

A view from the Crew

Two Crew 2000 volunteers describe how they got involved and why

It was a Monday night in October 1992. We were listening to music and playing indoor football at our local youth centre when a drug worker called Willie came in to give us a meeting (or some may have called it a lecture) about the drug ecstasy and other so-called 'dance scene' drugs. Some people found it boring and didn't care, others thought it was interesting. Willie told us all about the problems of the drugs and was astonished at how much some of us knew about them, things that he didn't even know.

At the end of the meeting a few of us were asked if we would like to come along to meet with a group of others about our age to pool some of our information. This group was called Crew 2000 but it was just starting off. We went along because a lot of workers, some of our friends, and ourselves, were concerned about the lack of information going out to people who take dance-scene drugs – ecstasy, speed, acid, hash, and downers.

The meeting included clubgoers, club DJs, and a few drug workers. At first there was a lot being thrown in by everybody. Main topics were dance drugs and the discussions gradually moved on to other drugs also around the dance scene such as Valium and temazepam. These were being widely used after the use of dance drugs for 'coming down'. There was a strong agreement in the group that for some people who could not afford to pay £15 for a tablet, downers were a cheap and readily available hit.

The result of this discussion was the production of Crew 2000's own and first leaflet, *Jellytime?*, which was knocked out in about two weeks. So around four weeks into really talking about the production of the leaflet, we were sitting surrounded by 10,000 *Jellytime?* leaflets filled with information on temazepam ('jellies') and other downers.

Before distributing the leaflets we decided to talk to people on the streets and maybe they could answer a questionnaire on drugs and drug use. That would give us an idea of the level of knowledge among young people. After all, that was what we wanted to know – whether there really was cause for concern. The responses were very interesting. People were truthful, and there was a high percentage of temazepam users.

Jellytime? started to hit the streets fast and the response was good and still is. We are looking forward to talking again with people and trying to find these truthful people who have hopefully read *Jellytime?*, and find out if they now know certain facts they didn't know before. Any progress is good progress.

The leaflet got a lot of praise at the International Conference on the Reduction of Drug Related Harm this year in Rotterdam which two members of the Crew were able to attend. This was a very large compliment to be paid.

We now thought that a launch event of some kind was needed. Somewhere we could have a party with DJs playing and lots of information on drugs available. Somewhere to meet clubgoers and get involved with putting something back into the scene. So Crew 2000 presented "The Event", hosted by The Vaults in Edinburgh on 25 June. It was a great night with guest DJs and a great crowd.

Now we are looking forward to hearing from the public and also looking for support by way of premises, sponsorships, and communications equipment, as we now have charitable status. Look out for further material by us, because you'll be hearing a lot more in the future.

DR and TC on behalf of Crew 2000

Ecstasy is here to stay. Live with it

THE SCOTSMAN
Saturday, 21 September 1996

Scientist backs 'safe house' call

Drugs: *Testing urged to protect users from deadly impurities in illegal substances such as ecstasy*

Rave task force

Group spread the word on drug dangers

Evening News – Local Daily Newspaper – Sat 26th December 1992 – Page 3

CLUBBERS, DJs and youngsters involved in the rave scene in Lothian have formed a special task force to spread the word about drug dangers.

The group — Crew 2000 — believes the drugs scene in the region is in danger of going out of control.

They have seen people in their own age group permanently damaged by drug abuse and now, frustrated by the lack of information and help available, they have decided to take matters into their own hands.

Crew 2000, which has around 20 members, including DJs, young people and drugs workers, are drawing up strategies to alert youngsters to the dangers of drugs in a realistic way.

Willie McBride, a drugs worker in the group, said: "It's all very well telling people just to say no.

"But that doesn't cut it with a lot of people. "We need to be providing them with basic information in a form they will listen to, or read, and take account of."

The group, who have been funded by [illegible]

CARE: The rave is on and the spirits are high, but one group in Lothian want to see young folk take more care, especially with drugs. Crew 2000 have formed a task force to spread the word about the dangers.

CREW 2000

CREW 2000 are a group of young people and others who are into giving out free and confidential information about all sorts of drug use and drug related problems.

They will be opening a shop in the centre of Edinburgh (in October) and everybody will be welcome. There will be **leaflets** (and more leaflets), **computer games** and other things about **safer drug use - drugs info at the touch of a button - information that goes out as soon as it comes to us.** The shop will be open at times that suit everybody - by the end of the year they will be open Wednesday and Friday afternoons, Thursdays (late night shopping) and Saturdays.

The most important aim is to give everybody up-to-date SOUND information about drugs. They are into people enjoying the party - enjoying themselves - having a good and safe time.

CREW 2000, PO Box 2000, Edinburgh, EH2 4RU

A Cut Above

Scotland on Sunday · 16 April 95

Crew 2000 is a different kind of drug agency. Their leaflets tell it like it is and their workers really know their A, Bs and Es – not to mention the difference between hardbag and hardcore. This month they open an advice shop in central Edinburgh. Coleen Anderson investigates

Taking Es, trips, spliff, speed and jellies is against the law but you might be doing it anyway, or you probably know someone else who is. Drugs can be dangerous – the deaths at Hanger 13 last year proved that – but was it the drugs or just the combination of circumstances, or overheating maybe, that caused the fatalities? Was the E pure or was it mixed with rat poison or some other nasty substance? And how do you find out?

It's hard to get any sensible talk about drugs going when the mere mention of the word often causes panic and hysteria. It's a bit like sex education – we all need it but there's precious little around that's frank enough and actually deals with reality. Sometimes just asking for information about drugs raises the suspicion that you're on a slippery slope to degradation and death, but not asking means you stay ignorant.

Crew 2000 know all about these paradoxes – that's why they're there. They believe you have a right to information which is both accurate and credible, and this month they'll be opening a drugs advice shop in the centre of Edinburgh to provide just that – "People were just laughing at the 'Just Say No' stuff," says one of the Crew's workers, Liz Skelton.

Crew 2000 is not a conventional drug agency. It's run by volunteers aged between 16 and 30 – volunteers who know the difference between hardbag and hardcore! It sprang out of the rise in the use of dance drugs and this is reflected in their work. They run a stall at Rezerrection where they distribute leaflets and information, and they're looking at distributing leaflets in other clubs as well as fashion and record shops.

The leaflets they produce aren't just a dry list of dos and don'ts: each features a whacked-out cartoon strip that tells it like it is.

The Crew also distributes leaflets from other credible organisations such as those of the Manchester based "Lifeline". These include titles such as: "How To Survive Your Parents Discovering You're A Drug User" and one about how drugs affect women in particular – "Clare And Jose Get Off Their Cake"! The advice shop will also have a computer with as much information on drugs as they can load into it – video, sound, graphics, the lot. Future plans include a regular publication and they would also like to see organisations similar to Crew 2000 set up in other parts of Scotland to cater for local situations.

The Crew thinks keeping close to what's actually happening on the streets and in the clubs is important. "A lot of people working in the drugs field don't really know what they're talking about," says one of the volunteers, Graeme. "It's a two way thing," adds Liz. "We get information from people who are out there taking drugs – the idea is that if we hear about a new drug going around we can get information about possible dangers out to as many people as possible."

The members of Crew 2000 are more likely to be dressed for the dancefloor than in the white coats of healthcare professionals. Credibility is the key as good information won't make any difference if the people who are taking drugs, or are thinking about doing it, don't read it. Crew 2000 want you to make up your own mind and they're there to give you the information you need.

Further Information

If you like the sound of what Crew 2000 are doing and want to help or if you just want more information about what drugs do to you and how to prevent problems, the Crew 2000 are based at 32 Cockburn Street, Edinburgh EH1 1PB or phone 0131 220 3404.

VERSION 1.0 - 12 SEPTEMBER 2017

CREW IS 25!

Since forming in 1992, Crew has been working in the drugs field to provide credible, up-to-date information on the drugs that people are taking, so they can make informed decisions about their own health. Over the last few decades, Crew has documented dramatic shifts in drug consumption and behaviours in Scotland.

This report was created as a supporting document to the end of year report presented to the Scottish Government, Substance Misuse Unit (SMU). The NPS Coordinator post at Crew was funded by the SMU.

This document provides an update of the NPS scene and an overview of drug trends in Scotland, from 01 April 2016 to 31 March 2017.

We thank our volunteers, service users and partners for sharing their experiences with us and our heartfelt thanks go out to everyone who has supported Crew.

If you would like to volunteer or support the work of Crew, we would love to hear from you! Email us at vicki@crew2000.org.uk.

Thank you.

INTRODUCTION

In the UK, the licensing and use of drugs is legislated by the Misuse of Drugs Act (1971) (MoDA). The Act is a legal framework designed to control harmful substances based on their chemical structure. The law governs the licensing, production, supply and possession of drugs through criminalisation.

In May 2016, the Psychoactive Substances Act (2016) (PSA) was enacted, prohibiting the sale of substances capable of producing a psychoactive effect. After over a year of reporting, the questions now are, what has changed and what has been the impact?

NEW PSYCHOACTIVE SUBSTANCES

This is the third annual NPS report from Crew. If you want to start at the beginning, click below to view the previous reports:

NPS at Crew, Annual Report, 2014-2015

NPS at Crew, Annual Report, 2015-2016

NPS Definition

New Psychoactive Substance (NPS or sometimes "legal high") is a catch-all term, normally used to describe a drug that has a similar effect to a banned drug but that has not been specifically covered by the Misuse of Drugs Act (1971), due to slight changes in its chemical structure. The effect, duration and appearance of each NPS varies but most come in powder, pill or "herbal" form.

NPS use was incentivised due to their availability, cost, lack of detectability, purity and legal status. There was also a misconception that they were less harmful than illegal drugs; however, they were only legal because legislation could not keep up, not because they were safe.

The Drugs Wheel (Figure 1) categorises drugs based on effect. At Crew (within our support, drop-in and training services), the most common NPS reported are stimulants, cannabinoids (Synthetic Cannabinoid Receptor Agonists, often referred to as SCRAs or "spice") and depressants (benzodiazepines).

The Drugs Wheel

A new model for substance awareness

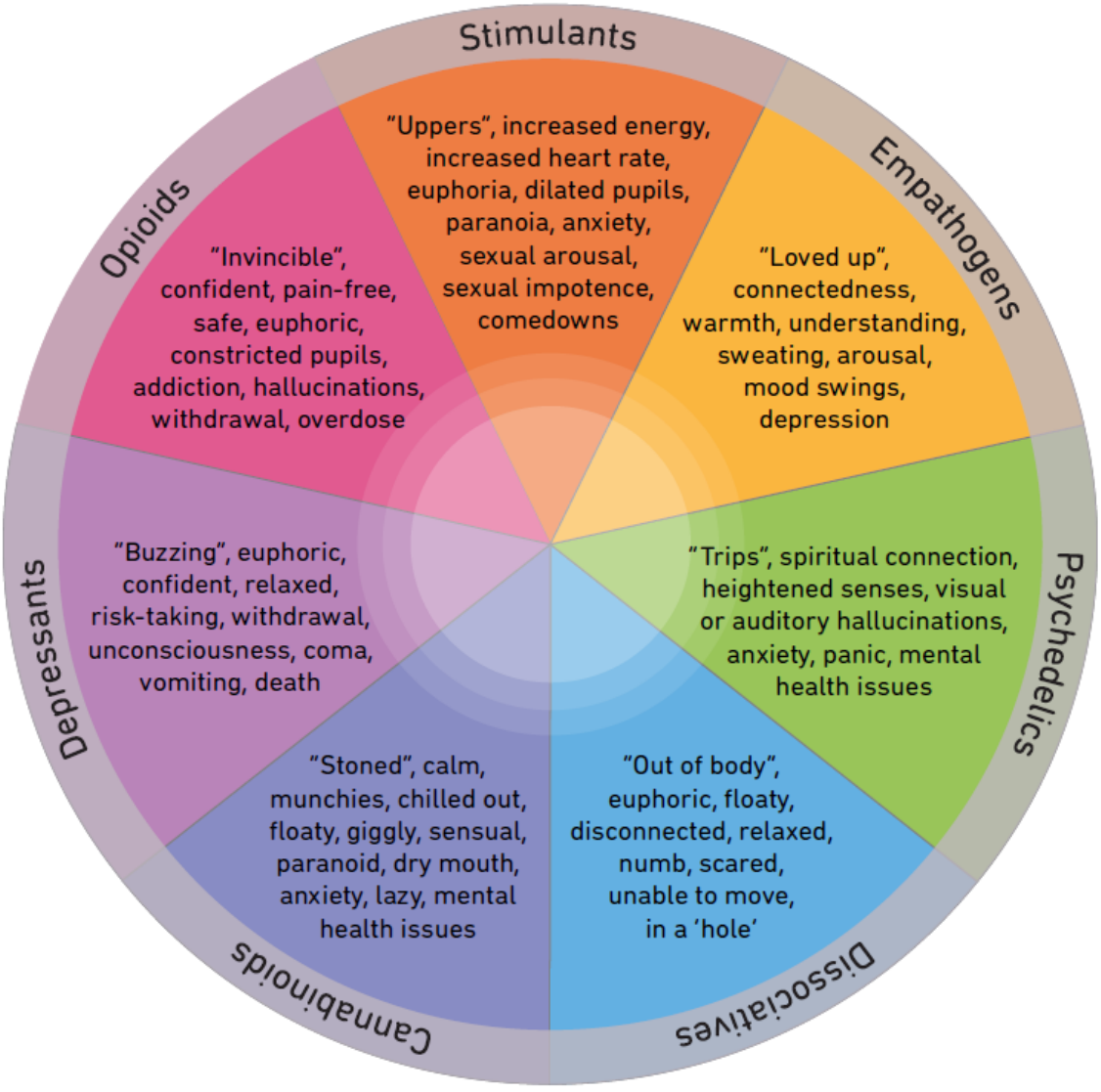


Figure 1: Drug Wheel Categories

HARMS

People take drugs for a desirable effect and realistically, relatively few will experience long-term negative consequences. Short-term negative effects are common and prolonged use can cause severe health issues.

Polydrug use, high doses, risky routes of administration, poor existing health, poor living conditions and a lack of information and education increase harms. The harms caused by NPS are similar to the harms caused by illegal drugs. When NPS were legal, some harms were exacerbated, as on average NPS were purer and more available.

The main harms of problematic NPS use are broadly categorised below.

Physical health

- **Health harms** include soft tissue damage, organ failure, nerve damage and muscle wastage.
- The **injecting** of NPS stimulants causes many harms and these are exacerbated by injecting frequently (due to the short lived high), injecting multiple drugs, poor injecting technique (including insufficient hygiene and filtering, and the unnecessary use of heat and citric acid), adulterants blocking veins, and the corrosiveness of the substances (especially in high doses). Stimulants also cause the veins to constrict and this can make injecting more difficult, leading to greater harm.
- The intense stimulant high lowers inhibitions and can lead to public injecting, discarded sharps, communal injecting and the sharing of paraphernalia.
- **Blood Borne Viruses (BBVs)** such as HIV and hepatitis C can be spread by sharing paraphernalia.
- NPS injecting also caused an outbreak of **bacterial infections** resulting in wounds, abscesses and tissue death. This remains a potential risk.
- **Acute Behavioural Disturbance** is a medical condition where individuals may present with no medical signs and then quickly deteriorate. Symptoms include agitation, constant movement and extreme strength. In some cases, excessive restraint can be fatal.
- Physical health issues are not solely caused by the effect of the drug but also **secondary factors such as weight loss, dehydration and malnourishment.**
- **Withdrawal** refers to the negative symptoms experienced after the cessation of drug taking. Severity will depend on the dose and type of drug. Symptoms can include anxiety, irritability, hallucinations, seizures, vomiting, diarrhoea, pain, fever, chills and a lack of appetite.
- **Death** is the ultimate harm that results from taking drugs. However, deaths attributed to any combination of the harms above, or from the toxic effects of a substance not controlled by the MoDA are not included in the “baseline” drug related death statistics (Figure 12).

Mental health

- Mental health harms can be caused by the effect of a drug, drug withdrawal or by actions or experiences that happen while under the influence.

- Mental health harms include **depersonalisation, trauma, depression, anxiety, psychosis and suicidal ideation.**
- Mental health can be affected by **secondary factors such as loneliness and isolation** which can be caused or exacerbated by drug use.
- People who take drugs may also experience **discrimination and stigma** which negatively effects wellbeing.

Sexual health

- Many drugs **lower inhibitions** causing people to take risks.
- Harms include BBV/Sexually Transmitted Infection (STI) transmission, assault, regret and unintended pregnancy.
- Some drugs interact with and reduce effectiveness of **hormonal contraceptives**[1].
- If someone regularly has sex whilst under the influence, they may lose the ability to enjoy "sober sex" and become dependent on drugs for sexual function.
- Some drugs **impair sexual function** e.g. they reduce ability to establish/maintain an erection.
- **Chemsex** (the use of drugs in a sexual context) lowers inhibitions and may lead to condom-less sex with multiple partners, which substantially increases the risk of exposure to BBVs/STIs and other harms.

Other

Not all harms are health related. Problematic NPS use is also linked to:

- The **breakdown of relationships, the loss of employment and housing tenancy and reduced attainment in education**.
- **Crime** fuelled by lower inhibitions and out of character and erratic behaviour.
- Crimes, including **theft and robbery**, which are committed to fund dependence on a substance.
- **Debt** caused by someone spending more than they can afford on drugs.
- **Violent, aggressive and antisocial behaviour** caused by the side effects of some drugs.
- Illegal behaviour can also result in a **criminal record and prison sentence**.

UK DRUGS LEGISLATION

In relation to drug legislation, the UK has a conservative, prohibitionist government and all recent amendments to drugs laws have focussed on strengthening enforcement powers. Drug legislation is reserved to Westminster and Scotland does not have devolved powers.

Recently, several changes have been made to existing drug legislation in an attempt to curb the harms caused by NPS (Figure 2).

Figure 2
Timeline of drug laws

In Lothian, the NPS situation reached a tipping point when hundreds of people began to inject the stimulant, ethylphenidate. This caused a range of harmful effects including psychosis, soft tissue infections, abscesses, difficulty breathing, fever, confusion and in some cases, death. In Lothian, from September 2014 to August 2015, a total of 192 cases of *Streptococcus pyogenes* and/or *Staphylococcus aureus* infection were identified in people who inject drugs, mainly in people injecting NPS. Many of these infections were severe, with patients requiring hospital admission and surgical intervention[2]. These harms were reported to the Home Office by Police Scotland and ethylphenidate (and four other methylphenidate based compounds) were banned in April 2015 under a temporary class drug order. In June, this order was extended to include other related compounds as well as ethylphenidate salts and isomeric forms.

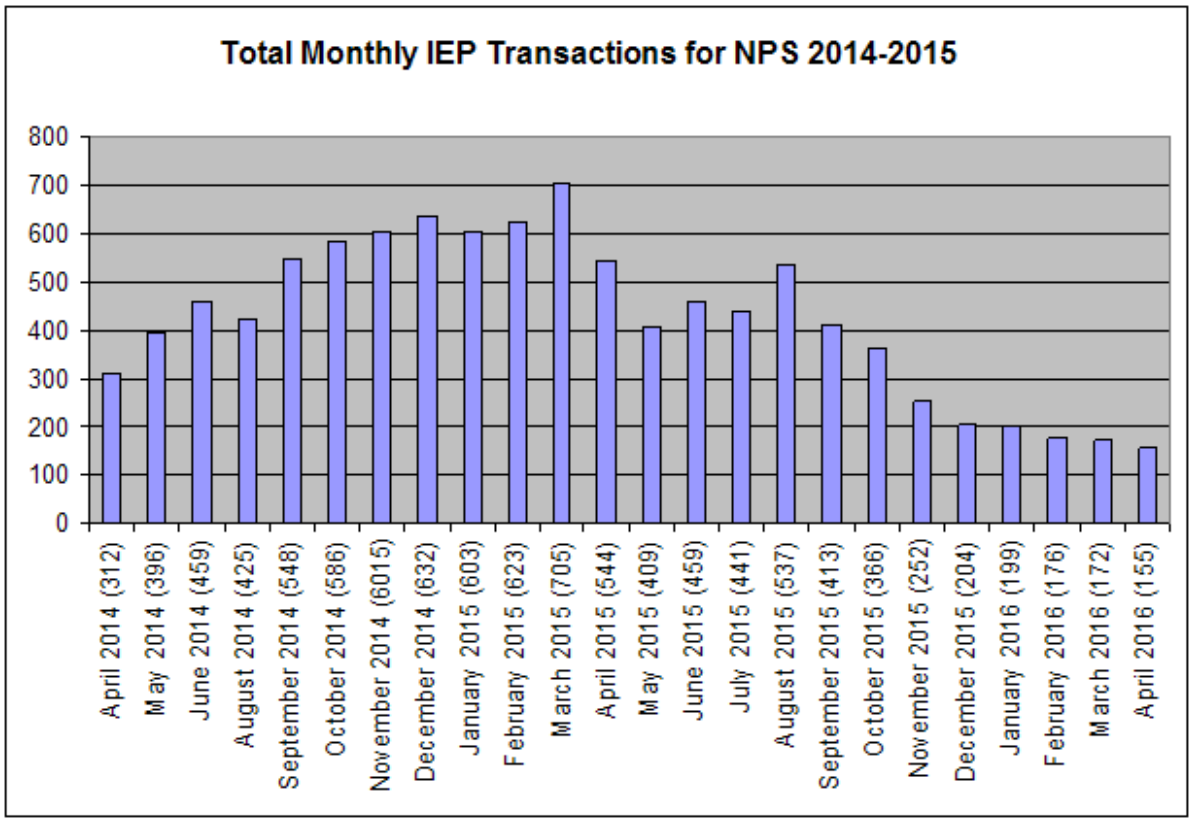


Figure 3: Monthly Injecting Equipment Provision for NPS in Lothian, Needle Exchange Outreach Network Statistics

There was a decrease in the number of NPS injecting equipment provision transactions after April 2015 (Figure 3) but NPS injecting did not stop completely and after ethylphenidate was temporarily banned, some people switched to methiopropamine (MPA), which was uncontrolled and often found in branded NPS packets. Some people also switched back to injecting heroin.

We also saw an increase in two other legal NPS stimulants: 3-Fluorophenmetrazine (3-FPM) and mexedrone. 3-FPM appeared in our street collection data[3] at the end of April 2015, when it was sold under brand names previously used by ethylphenidate products, such as Magic Crystals and Go Gaine. Mexedrone was first seen at Crew at the beginning of September and used brand names that alluded to mephedrone, such as MexeCAT (Figure 4).

Figure 4: Stimulant NPS

Prohibition fuelled innovation in the development of NPS, as new chemicals were regularly created to replace those that were banned. To avoid the "cat and mouse" approach to NPS control, the UK government announced plans to blanket ban psychoactive substances, regardless of harm. The aim of the Psychoactive Substances Act (2016) was to "bring to an end the open sale on our high streets of these potentially harmful drugs". However, this goal was partially achieved in Scotland in 2015, using General Product Safety Regulations (2005) (GPSR).

SCOTTISH LEGISLATION

Police and Trading Standards used General Product Safety Regulations (2005) to issue forfeiture orders to premises selling NPS in Scotland. Between October and December 2015, 147 Scottish shops surrendered NPS stock to Trading Standards. This was the first such order for NPS in Scotland. Some local authority areas in England also introduced similar restrictions.

Figure 5: Branded NPS packets

Operation Alexander started in the City of Edinburgh on the 15th of October 2015, where 13 shops were targeted. It provided an opportunity for shops to voluntarily hand over their NPS supply for destruction and to agree to stop selling. If they did not comply, they were warned further action would be taken. The order tackled specific types of synthetic NPS, not herbal substances. Since the action, outcomes for these shops have been mixed; some shops closed, many reduced their opening hours and some rebranded into e-cigarette shops.

This enforcement action reduced availability and led to a drop in NPS consumption before the PSA was introduced. Due to continuing reports of harm caused by legal NPS across the UK, a blanket ban was subsequently enacted. The Psychoactive Substances Act was introduced on the 26th of May 2016, becoming one of two key pieces of legislation governing UK drug laws.

Figure 6: UK Drug Legislation

THE PSYCHOACTIVE SUBSTANCES ACT (2016)

- The Act is a blanket ban on all substances capable of producing a psychoactive effect, irrespective of whether or not they cause harm.

- Section 2 of the Act[4] defines a "psychoactive substance" –

> ***2*** *Meaning of "psychoactive substance" etc*
>
> *(1) In this Act "psychoactive substance" means any substance which—*
>
> *(a) is capable of producing a psychoactive effect in a person who consumes it, and*
>
> *(b) is not an exempted substance (see section 3).*
>
> *(2) For the purposes of this Act a substance produces a psychoactive effect in a person if, by* ***stimulating or depressing the person's central nervous system, it affects the person's mental functioning or emotional state;*** *and references to a substance's psychoactive effects are to be read accordingly.*

- The Act makes it an offence to manufacture, import, export, supply, or offer to supply any psychoactive substance, thereby banning the sale of NPS from shops and UK-based websites. Importation includes buying a psychoactive substance from a non-UK based website and having it delivered from another country.

- Possession is not an offence, except in a "custodial institution", such as a prison.

- Police have increased powers to stop and search individuals and premises, and NPS may be treated like a controlled drug until proven otherwise.

- Alcohol, nicotine, tobacco, food, caffeine and "medicinal products" are exempt from the Act.

- Nitrous oxide (laughing gas) is exempt and the Home Office notes it "has several legitimate uses in medicine and dentistry. It is also used as a fuel additive and as a component of rocket fuel, and is sold as an aerosol spray propellant within whipped cream canisters.[5]"

- Alkyl nitrites (poppers) are exempt as they are not psychoactive, according to the definition in the Act. They can be used to relax muscle and their primary effect is on the autonomic nervous system, not on the central nervous system.

- The Human Medicines Regulations (2012) and the Misuse of Drugs Act (1971), including Temporary Class Drug Orders (TCDOs), remain unchanged.

- The Intoxicating Substances Supply Act (1985), which was only in force in England, Wales and Northern Ireland, was scrapped. This made it an offence to sell volatile substances, like glue, to under 18s if it was believed it would be inhaled. The PSA makes it an offence to sell volatile substance to anyone, regardless of age, if the seller believes it would be used for a psychoactive effect.

- Penalties range from civil sanctions to a seven-year prison sentence but some offences are considered to be aggravated, including the sale to under 18s or around schools.

WHAT ARE THE LIMITATIONS OF THE ACT?

- Some people who use Crew's services are unaware that the PSA exists and many of those who are aware report difficulty in understanding the details. There was (and still is) little official guidance on the legislation and this can leave people and services confused as to the legal status of the drugs.

- The Act criminalises those in possession of a psychoactive drug in a "custodial institution", further increasing the harm related to drug use.

- An often over looked part of the PSA is paragraphs 36 - 48 which gives police "powers of entry, search and seizure" in relation to psychoactive substances. In addition to increased search powers, the police have the right to seize anything that they think may be "a psychoactive substance (whether or not it is relevant evidence)" despite possession of non-controlled psychoactive substances being legal.

- Although nearly 500 people were arrested in the first six months of the Act's implementation, only four have received a prison sentence[6]. One reason for the low number of sentences may be because the legislation is relatively new and it can be argued that the substances were acquired prior to the Act being introduced.

- There are also challenges for the prosecutor in proving something is psychoactive, given that effects are subjective and there is no objective, empirical measure for psychoactivity.

- After gaining Royal Assent on the 28th of January 2015, the Act was due to be implemented on the 6th of April 2015 but was delayed due to concerns regarding enforcement and forensic testing. This uncertainty regarding the implementation of the Act can be exploited in a court of law, so prosecuting is a greater challenge.

- The wording of the Act is subject to interpretation. For example, the Act exempts "medicinal products" and explains that "medicinal product" has the same meaning as in the Human Medicines Regulations (2012) (HMR).

- Part 1, section 2 of the HMR[7] defines a "medicinal product" –

> ***2.*** *(1) In these Regulations "medicinal product" means—*
>
> *(a) any substance or combination of substances presented as having properties of preventing or treating disease in human beings; or*
>
> *(b) any substance or combination of substances that may be used by or administered to human beings with a view to—*
>
> *(i) restoring, correcting or modifying a physiological function by exerting a pharmacological, immunological or metabolic action, or*
>
> *(ii) making a medical diagnosis.*

- Because this definition is vague, it can be argued that many drugs are “medicinal products” and are therefore exempt from the Act. For example, benzodiazepines are used as medicines; therefore, if they are being sold as “medicinal products” they are exempt. However, their sale may contravene the HMR. The maximum penalty on conviction for an HMR offence is two years’ imprisonment, compared to seven years for a PSA violation.

- Perhaps this legislative weakness is partially why on the 31st of May 2017, 16 benzodiazepines were banned as Class C drugs (etizolam, diclazepam, flubromazepam, pyrazolam, deschloroetizolam, flubromazolam, nitrazolam, nifoxipam, clonazolam, 4'-chlorodiazepam, bromazolam, meclonazepam, adinazolam, metizolam, 3-hydroxyphenazepam and fonazepam). Although this is outwith the reporting period for this report, we anticipate that if supply is impacted, people may withdraw or switch to similar, widely available substances, such as diazepam (Valium) and alprazolam (Xanax).

- Although the stance that “possession is not illegal” is a progressive component of this policy, drugs continue to be scheduled under the MoDA to aid enforcement. In December 2015, the “third generation” of synthetic cannabinoids were made Class B drugs. While this makes it easier to prosecute, it also criminalises those who are caught in possession, which increases harm related to the drug. Even before this update was introduced, “fourth generation” cannabinoids, which are not covered by the MoDA, were being detected in the UK. Constant updates to legislation force changes on an already fluid and complex situation.

While we agree that action was needed to change the situation with legal NPS, we were disappointed that the Act was implemented in isolation and independently of other efforts to reduce harm. The government has missed an opportunity for drug reform; without addressing other related issues, we have simply changed the problem, not solved it.

In our NPS annual report 2015-2016 we anticipated that the consequences of the PSA would be as follows:

1. People **stop** using NPS.

2. They use alternative substances:
- **Alcohol**
- **Solvents** and other glues/gases
- **Opioids:** If someone switches to opioids from non-opioid NPS they will have a reduced tolerance and **increased overdose risk**. Services need to be trained and the supply of naloxone increased.
- **Stimulants:** As many NPS are stimulants this gives potential for increased appetite in stimulants and may subsequently cause a rise in amphetamine, cocaine and mephedrone use.
- Homemade drugs: increase in physical harm.
- **Other controlled drugs**
- **Medicines:** Increased pressure from patients on GPs and prescribing services to issue psychoactive drugs such as diazepam, gabapentin and pregabalin.

3. People **stockpile** NPS. Vendors encourage people to buy up NPS stocks before the ban with many attractive deals to buy in bulk. This increases the chance of people taking more than they anticipated and also increases the likelihood of people dealing as they will have large quantities and the potential to make a profit.

4. Increased **pressure on health services**, at least in the short term due to people needing support and withdrawing without any substitute prescription therapies or clinical guidelines.

5. People are **less likely to know** what drug they are taking. Legal NPS generally list the ingredients on the packet. Many controlled substances are sold in unlabelled, plain packaging.

6. Increased **exposure to criminality** and exploitation due to a requirement to use dealer networks.

7. **Displacement** of market to the internet provides access to more drugs and an increased choice will increase the array of drugs used.

8. Workers knowledge will no longer be up to date due to changing trends and diversification of drug market. **Retraining required.**

9. Use of substances in **some settings (e.g. prisons) is likely to continue** due to potency and lack of testing.

10. It is **impossible to monitor** and regulate an illegal market.

11. Negative impact on public health as people may be unable to buy products which also enhance wellbeing, such as herbal remedies.

12. The UK Government will **no longer make the 20% VAT** which is charged on the sale of each NPS in a shop (and on a UK-based website).

13. It **reduces respect** for the UK Government due to scientific illiteracy and failure to address wider societal issues.

14. An **increased market of illegal drugs** funds crime.

15. The legal status of NPS varies across the world and **NPS may be pushed onto other countries** resulting in an increase in use and harm elsewhere which highlights the importance of working at an international level.

Figure 7
Consequences of PSA

WHAT EFFECT HAVE THESE CHANGES HAD ON THE SCOTTISH DRUG SCENE?

Figure 7 shows our predictions from 2016, for the consequences of the PSA. We have not been surprised by changes in drug trends after the introduction of the Act (and other enforcement actions) but it is now more difficult to monitor these trends, as the market has been pushed underground.

NPS are still being referred to by some as “legal highs”, because if the drug is not covered by the MoDA, it is still legal to possess for personal use.

Many people stopped taking NPS as the change in legislation reduced availability and removed the appeal of legality. Whilst people have stopped taking NPS, some areas of the country have reported an increase in NPS use. These areas also tend to have the highest levels of social deprivation and it is reported the NPS trade in these locations is now being pushed by dealers, rather than shops.

The Act criminalises those in possession of a psychoactive drug in a custodial institution but ironically, most of the concerns reported to Crew regarding NPS use are from prisons, where the use of synthetic cannabinoids has increased since the PSA.

Despite a reduction in NPS use, there is no evidence to suggest that drug use overall has declined. The market has diversified and been swept up by street dealers and the internet.

Method of purchase

Prior to Operation Alexander, many NPS in Scotland were purchased from a shop. After this operation, most sales from high profile retailers had stopped; in fact, the commercial NPS trade had almost ceased completely before the PSA was introduced.

The PSA did have an immediate impact on online trading. Only 24% of UK-registered websites that sold NPS remained open after the ban[8]. It was noted that these websites also sold to other countries, which demonstrates the need to collaborate internationally.

While NPS retailers closed on the high street and online, we still see people using the internet to order both NPS and controlled drugs. In addition, many pharmaceuticals can be purchased from open websites (Figure 8). As a result of the PSA, we anticipate that the use of unlicensed pharmaceuticals will increase due to their relative availability.

Social media and secure messaging apps (that automatically encrypt or delete messages), are also being used to buy and sell drugs. The digital world has no borders and the dark web is responsible for an increasing number of drug sales. This online shift means people no longer need to be connected to a dealer but can log on to buy for themselves and others.

Drugs are currently being couriered by commercial companies. They are profiting from the online trade and any drug screening program would be a substantial financial burden and it therefore seems unlikely that they will introduce controls to prevent drugs passing through their services, unless more legislation is introduced.

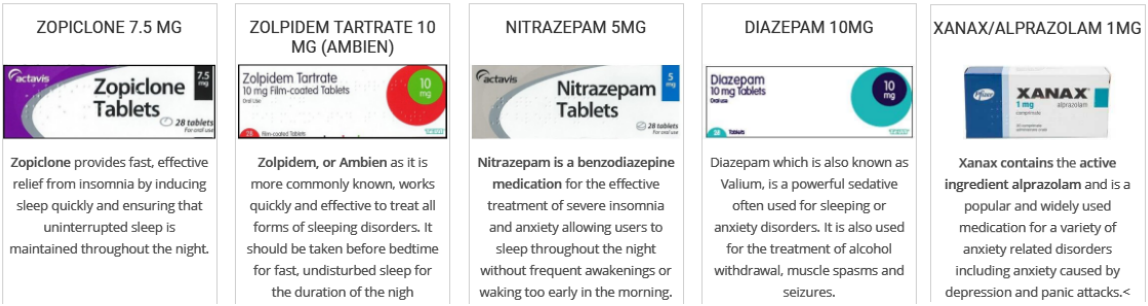


Figure 8: Pharmaceuticals on the open web

Marketing

The marketing of legal NPS was clever and looked legitimate. It was not representative of potential harms and people therefore underestimated these drugs. Their packaging was bright, colourful and appealing and they were sometimes marketed using promotions such as variety packs and buy two get one free offers. They were sold as “novelty collectors’ items”, “herbal incense” and “research chemicals” and branded with euphemistic names such as “Ching”, “Synthacaine”, “Exodus Damnation” and “Chillax”.

The introduction of the PSA has eliminated this heavily branded and semi-regulated market. Most NPS reported to Crew since May 2016 have been in plastic wraps or bags with no information (Figure 9).

Figure 9: Snapbag

The marketing of drugs is an effective tool to drive sales and increase use, and we must consider the impact of marketing carefully when looking at future drugs legislation and regulation.

Price

Non-controlled NPS are generally cheaper and purer than drugs covered by the MoDA, although the introduction of the PSA means NPS are relatively more expensive than they were before the Act.

The price varies across the country but in the last three years the average price of 1g of synthetic cannabinoids (sprayed onto plant material) has increased from £7 per gram to £12 per gram and the average price of stimulants has increased from £10 per gram to £30 per gram.

The source price of many NPS is low, especially when bought in bulk and their high profit margin makes them attractive to vendors. In general, synthetic drugs are cheaper as they can be made in a laboratory and their manufacture is less labour intensive than drugs that are extracted from plants, such as cocaine and heroin.

NPS REPORTS

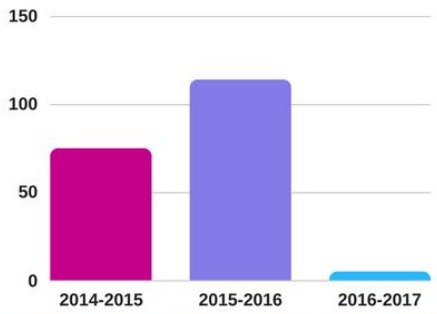
For three years we collected NPS packets and recorded concerns related to NPS use.

In comparison to previous years Crew has seen a significant reduction in the number of concerns related to the use of legal new psychoactive substances.

All 'years' run from 01 APR-31 MAR, except 'no. of brands, 2014-2015' which runs from 21 JUN-31 MAR.

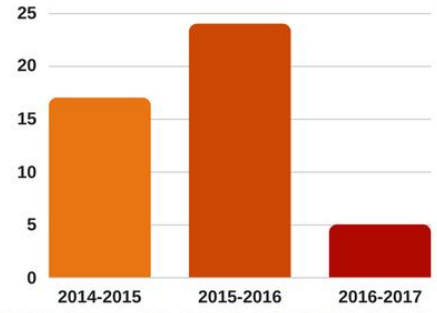
1. NO. OF BRANDS

The number of different branded packets which were collected from the surrounding streets or handed into Crew from other organisations.



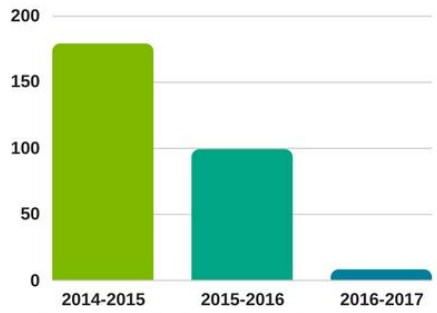
2. NO. OF DRUGS

The number of different chemicals listed on the back of packets. Not all substances were tested.



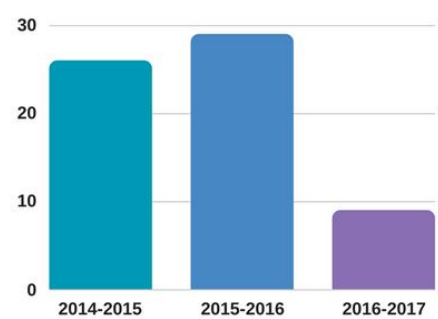
3. NO. OF CONCERNS

The number of concerns related to the use of NPS reported to Crew across its services.



4. % OF CLIENTS

The percentage of our counselling clients reporting a type of 'legal high' as their 'primary drug'.



CREW

Figure 10
Crew NPS Reports

1. Number of legal NPS brands

In 2014-2015, thousands of NPS packets littered the streets of Scotland. Graph 1 in Figure 10 shows the number of different brands of NPS that were collected by Crew. This is only a small proportion of the total number of packets as many were duplicates.

Since Operation Alexander, we have seen fewer brands and numbers have reduced from 114 in 2015-2016, to 5 in 2016-2017.

2. Number of drugs

Before the PSA there were hundreds of products and brand names in circulation but only around 20 NPS were being commonly used in Scotland. The majority of the drugs reported could be categorised as a stimulant or cannabinoid[9,10]. Reports of depressants increased after the introduction of the PSA. The EU Early Warning System detected 66 NPS for the first time in 2016. This is less than the number detected in 2014 and 2015 but higher than all other previous years and by the end of 2016, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) was monitoring more than 620 NPS[11].

Figure 11: Type of NPS

3. Number of NPS concerns

There has been a welcome reduction in the number of concerns related to NPS since the introduction of both the PSA and enforcement action. Across all Crew's services, concerns (where people reported worries or side effects related to use) fell from 179 in 2014-2015, to 99 in 2015-2016 to 8 in 2016-2017. The most common concerns were related to health and frequently reported side effects included low mood, paranoia, insomnia, weight loss, anxiety, loss of memory, seizures and black outs[9,10].

We saw a marked difference in our drop-in, where NPS enquiries fell from 572 in 2015-2016 to 86 in 2016-2017.

4. Percentage of Crew clients taking "legal highs"

In 2014-2015, 26% of our counselling clients were reporting "legal high" use. This increased to 29% in 2015-2016 before reducing to 9% in 2016-2017. The percentage decline in "legal high" use has been replaced with an increase in the percentage of clients reporting cannabis, cocaine and MDMA.

DRUGS TRENDS

Since Operation Alexander and the introduction of the PSA, we have seen a reduction in people taking NPS presenting to Crew's services but we have not seen a significant reduction in drug use.

The PSA may have removed the legality and reduced the availability of NPS but many people switched to other drugs. Legal NPS made drugs available to the masses and interest has not disappeared with the introduction of the new legislation. Between April 2016 and March 2017, we observed several drug trends:

Stimulants

a. An increase in **cocaine** use has been reported across many Scottish drug and health services. Many NPS were stimulants and this has given people an appetite for these effects.
b. This rise has also taken place as Colombia's coca cultivation increased from 96,000 hectares in 2015 to 146,000 hectares in 2016[12]. This rise in production may be due to farmers increasing their coca farming prior to the introduction of alternative development strategies. These strategies are designed to encourage farmers to grow fewer illicit crops, in return for subsidies and the more land they stop growing on, the greater the reward. If the amount of cocaine declines while demand continues to increase, we anticipate a rise in adulterated cocaine and synthetic stimulants.
c. Historically, **crack cocaine** was seldom reported to Crew but we have seen an increase in its use since the PSA, highlighting the need for new harm reduction messages and strategies e.g. the provision of smoking equipment such as pipes.
d. We have also seen an increase in those injecting cocaine and therefore need to ensure people can access information on stimulant injecting practices.
e. The use of **study drugs** is increasingly being reported to Crew. They are generally prescription only medications, such as modafinil.
f. Repeated, high doses of stimulants are likely to cause weight loss, poor sleep quality and an increase in paranoia and anxiety. Services should monitor and respond to this change in drug consumption.
g. Stimulants are generally a fine to crystalline white or off-white powder. **NPS stimulants** give effects similar to cocaine and amphetamines and therefore we may see these drugs being adulterated with NPS.
h. Cocaine is a Class A drug and its use has the most severe penalties. Some NPS stimulants are illegal to possess and/or supply as Class B drugs. Others, such as mexedrone and 3-FPM, are legal to possess but are covered by the PSA. Methiopropamine is controlled under a temporary class drug order which is due to expire in November 2017.

Empathogens

a. **MDMA** is a Class A drug and remains common in both pill and crystal form.
b. Some people have reported adverse reactions mainly due to difficulty in dosing e.g. taking full or multiple high concentration pills, not crushing crystal or powder or frequent redosing. Most side effects are caused by the way people take MDMA, rather than the drug itself.

c. Pills can vary widely in MDMA content and the concentration of MDMA found in the average pill has increased[13]. We must therefore communicate harm reduction messages appropriately. The Global Drug Survey shows this is especially important in Scotland, where people reported an average of 14.5 days of ecstasy (MDMA) use in the last 12 months. This is the second highest of all reporting countries and greater than the global average of 9.0[14].

Psychedelics

a. We have seen a small rise in the use of **LSD, DMT** and **magic mushrooms.** Most psychedelics will give a sense of spiritual connection but their effect is dependent on the person and the setting.
b. All controlled psychedelics are illegal to possess and/or supply as Class A drugs and this includes NPS psychedelics, such as AMT and 5-MeO-DALT. Others, such as Bk-2-CB and 1p-LSD, are legal to possess but are covered by the PSA.

Dissociatives

a. **Nitrous Oxide** (laughing gas or NOS) is a colourless gas with a slightly sweet smell and taste, which slows down responses causing euphoria, relaxation and dizziness. It is used as an anaesthetic in medicine and dentistry.
b. Nitrous oxide is widely available. It is also commonly sold in European holiday destinations.
c. **Ketamine** is a dissociative that can have a slight psychedelic effect and can cause feelings of euphoria, dissociation, time distortion, dizziness, loss of balance and numbed feelings or sensations. Tolerance builds quickly to ketamine and frequent high dosing increase harms. Ketamine use is associated with damage to the urinary system, which can be in the form of severe and in some cases irreversible bladder damage[15].
d. The anaesthetic qualities of dissociatives can make people more prone to injury and falls.
e. At Crew, we have seen the use of ketamine rise and become more mainstream, especially amongst those aged 16-30.
f. Ketamine and dissociative NPS, such as MXE are illegal to possess and/or supply as Class B drugs. Others, such as MXP, are legal to possess but are covered by the PSA.

Cannabinoids

a. **Cannabis** continues to be the most popular illegal drug seen at Crew, normally in herbal form.
b. **Synthetic cannabinoids** are chemicals that act on cannabinoid receptors. They are often dissolved and sprayed onto dried plant material. Effects include relaxation, feelings of heaviness, nausea, anxiety, paranoia, heart palpitations and strong cravings to redose. People have also reported an increase in severe mental health issues when using these substances including psychosis, suicidal thoughts and depression.
c. We see the highest rates of synthetic cannabinoid use among those in prison and those with no fixed address. They remain popular in prisons due to their potency, lack of detectability and extreme and escapist effects.
d. Before the PSA they were packaged and sold as “herbal incense blends”, using brand names such as Voodoo and Psyclone. Now they are generally being sold as “spice”.

e. Successive bans have fuelled the development of more dangerous and potent SCRAs.
f. Many synthetic cannabinoids are illegal to possess and/or supply as Class B drugs. The "fourth generation" are legal to possess but are covered by the PSA.

Depressants

a. We have seen a rise in the use of unlicensed benzodiazepines primarily **etizolam** and **diclazepam** over the last three years. This may be due to increased availability online compounded by a review of **diazepam**-prescribing in some Scottish local authority areas.
b. **Alprazolam** (Xanax) is a prescription-only medication covered by the MoDA as a Class C drug. It is not frequently prescribed in the UK but its use is becoming more prevalent. Between 2006 and 2015, alprazolam was implicated in five deaths. In 2016 alone, it was implicated in 24[16].
c. **Gabapentin and pregabalin** are prescribed for epilepsy and nerve pain but the recreational use of these drugs has increased. They are prescription-only medications and are not controlled by the MoDA. An NHS Lothian information sheet can be found here.
d. **Alcohol** is the most commonly used depressant drug. Sadly, in 2016, Scottish "alcohol related deaths" increased by 10% to 1,265, up 115 from 1,150 in 2015[17].
e. We have also seen a small rise in the use of **solvents**, primarily butane gas.

Opioids

a. **Heroin** use remains common in Scotland.
b. There have been a small number of reports of **fentanyl** (and its analogues) to Crew's services and it is being increasingly reported through Scottish forensic toxicology services either by itself or mixed with other drugs. Crew has updated its drug information site: www.mycrew.org.uk/drugs-information/fentanyls and a Drug Watch briefing can be found here: www.thedrugswheel.com/fentanyls.php. The emergence of synthetic opioids highlights the need to create occupational health protocols, reiterate harm reduction messages, increase naloxone provision and update naloxone guidelines. To do this we should work with services in the USA and Canada.

We have also seen an increase in the use of anabolic steroids in recent years, primarily amongst males aged 16-30. For more information or information on other drugs, visit www.mycrew.org.uk.

The use of NPS has reduced from worryingly high levels a few years ago but it has not disappeared. Despite an initial reduction in use, the further we get from the introduction of the PSA the more reports of NPS use we receive.

The PSA is the biggest change to drug legislation since the MoDA. Its introduction coincides with the highest drug related death figures since records began.

WHAT IS A DRUG RELATED DEATH?

A drug related death is generally a poisoning caused by the toxic effects of a controlled drug. Not all deaths related to the use of drugs are counted as a 'drug related death' and the definition is not straightforward.

The 'baseline' definition for the UK Drugs Strategy covers the following cause of death categories (ICD10 codes are in brackets):

a) deaths where the underlying cause of death has been coded to the following sub-categories of 'mental and behavioural disorders due to psychoactive substance use':
(i) opioids (F11);
(ii) cannabinoids (F12);
(iii) sedatives or hypnotics (F13);
(iv) cocaine (F14);
(v) other stimulants, including caffeine (F15);
(vi) hallucinogens (F16); and
(vii) multiple drug use and use of other psychoactive substances (F19).

b) deaths coded to the following categories and where a drug listed under the Misuse of Drugs Act (1971) was known to be present in the body at the time of death:
(i) accidental poisoning (X40 – X44);
(ii) intentional self-poisoning by drugs, medicaments and biological substances (X60 – X64);
(iii) assault by drugs, medicaments and biological substances (X85); and
(iv) event of undetermined intent, poisoning (Y10 – Y14)

Deaths which are not counted by the 'baseline' definition include deaths from:

- ✖ Alcohol, tobacco and volatile substances
- ✖ Any drug not covered by the Misuse of Drugs Act 1971 e.g. legal NPS
- ✖ Bacterial infections, for example, clostridium botulinum (botulism), bacillus anthracis (anthrax), staphylococcus aureus, even if the infection was contracted as a result of drug use
- ✖ Viruses, for example, HIV, hepatitis B and hepatitis C, even if the virus was contracted as a result of drug use
- ✖ Accidents or injuries which occur under the influence of drugs such as road traffic accidents, drowning, falls and exposure
- ✖ Assault by someone who is under the influence of a controlled drug
- ✖ Legally prescribed, non-controlled drugs
- ✖ Acute behavioural disturbances
- ✖ Suicide whilst under the influence (unless it was via an overdose of a controlled drug)
- ✖ Medical conditions related to drug use such as chronic obstructive pulmonary disorder, pneumonia, endocarditis

Figure 12
DRD Definition

DRUG RELATED DEATHS

On the 15th of August 2017, the Drug Related Death (DRD) statistics for 2016 were published. We delayed the release of this report to ensure we could include accurate data. Sadly, nothing reflects the grim reality of drug use in Scotland more than 867 preventable deaths.

In Scotland, deaths have increased by 23% from 2015 and by 41% from 2014[18].

Official drug related "baseline" death statistics only report on a narrow definition of "death" and do not include all deaths related to the use of drugs. In 2016, there were **867** deaths using the "baseline" definition and **997** deaths using the "wide" definition, which includes uncontrolled drugs (Figure 13). Using the "baseline" definition, the death rate in Scotland is **160 deaths per million people**, which far exceeds that of other European countries (Figure 14).

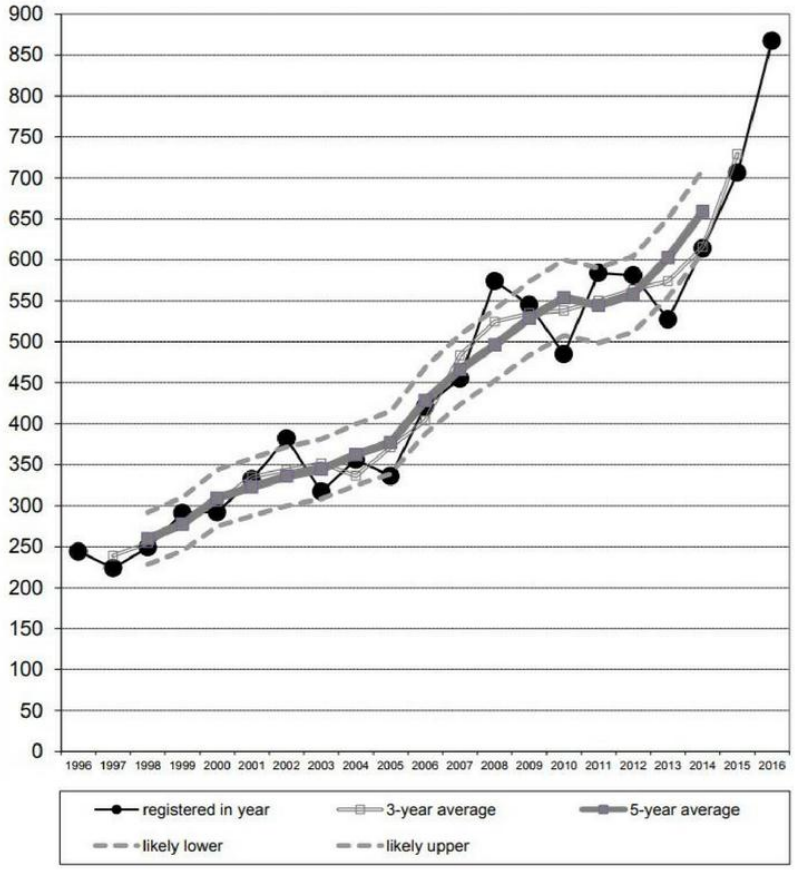
	Number of drug-related deaths, on the basis of:				Drug-deaths per million population		
Year	this paper (based on UK Drug Strategy 'baseline' definition)	Office for National Statistics 'wide' definition	European Monitoring Centre for Drugs and Drug Addiction 'general mortality register' definition [2]	Population	this paper (based on UK Drug Strategy 'baseline' definition)	Office for National Statistics 'wide' definition	European Monitoring Centre for Drugs and Drug Addiction 'general mortality register' definition [2]
1996	244	460	208	5,092,190	47.9	90.3	40.8
1997	224	447	188	5,083,340	44.1	87.9	37.0
1998	249	449	230	5,077,070	49.0	88.4	45.3
1999	291	492	272	5,071,950	57.4	97.0	53.6
2000	292	495	320	5,062,940	57.7	97.8	63.2
2001	332	551	378	5,064,200	65.6	108.8	74.6
2002	382	566	417	5,066,000	75.4	111.7	82.3
2003	317	493	331	5,068,500	62.5	97.3	65.3
2004	356	546	387	5,084,300	70.0	107.4	76.1
2005	336	480	352	5,110,200	65.8	93.9	68.9
2006	421	577	415	5,133,100	82.0	112.4	80.8
2007	455	630	450	5,170,000	88.0	121.9	87.0
2008	574	737	559	5,202,900	110.3	141.7	107.4
2009	545	716	534	5,231,900	104.2	136.9	102.1
2010	485	692	482	5,262,200	92.2	131.5	91.6
2011	584	749	558	5,299,900	110.2	141.3	105.3
2012	581	734	549	5,313,600	109.3	138.1	103.3
2013	527	685	516	5,327,700	98.9	128.6	96.9
2014	614	743	574	5,347,600	114.8	138.9	107.3
2015	706	813	637	5,373,000	131.4	151.3	118.6
2016	867	997	772	5,404,700	160.4	184.5	142.8

Figure 13: Table is an excerpt from Table X of National Records for Scotland, Drug-related deaths in Scotland in 2016.

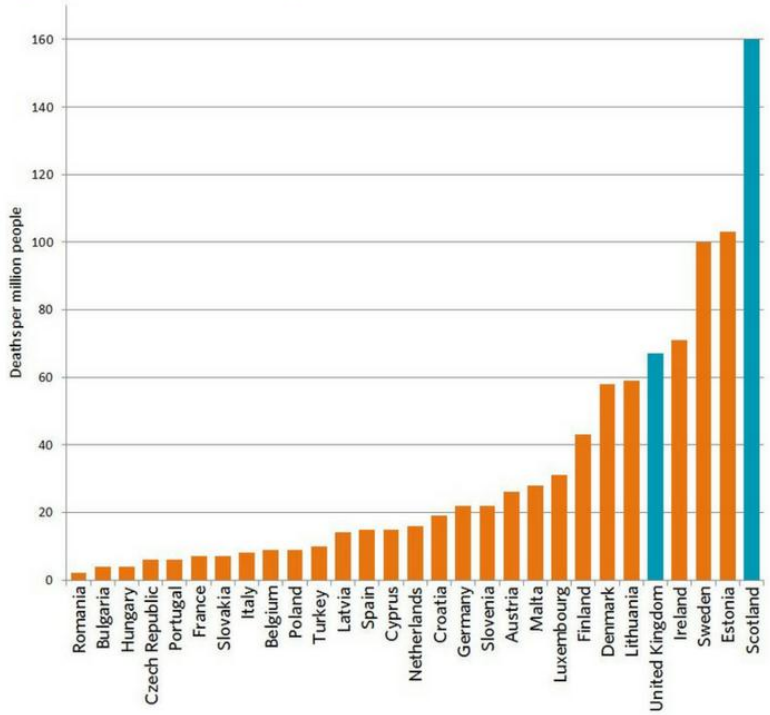
In the UK, successive governments have pursued a strategy of legislation, criminalisation and prosecution. Despite (or perhaps because of) this, the number of drug-related deaths has been increasing year on year. These numbers are not just statistics; each one represents a person who could be a colleague, friend or family member and every preventable death represents a national tragedy.

DRUG RELATED DEATHS 2016

Drug-related deaths in Scotland, 3- and 5-year moving averages, and likely range of values around 5-year moving average



Drug-related deaths in the European Union



First graph from Figure 1 - National Records for Scotland, Drug-related deaths in Scotland in 2016. Note: this graph is copyrighted by NRS. Second graph: 'Baseline' UK figures were taken from: Office of National Statistics, Deaths related to drug poisoning in England and Wales: 2016 registrations, 'baseline' Scotland figures were taken from: National Records for Scotland, Drug Related Deaths 2016. For all other countries the figures are taken from Table A6 of the EMCDDA's European Drug Report 2017 which includes following footnote: "Caution is required when comparing drug-induced deaths due to issues of coding, coverage and under-reporting in some countries."

Figure 14
DRD Trends

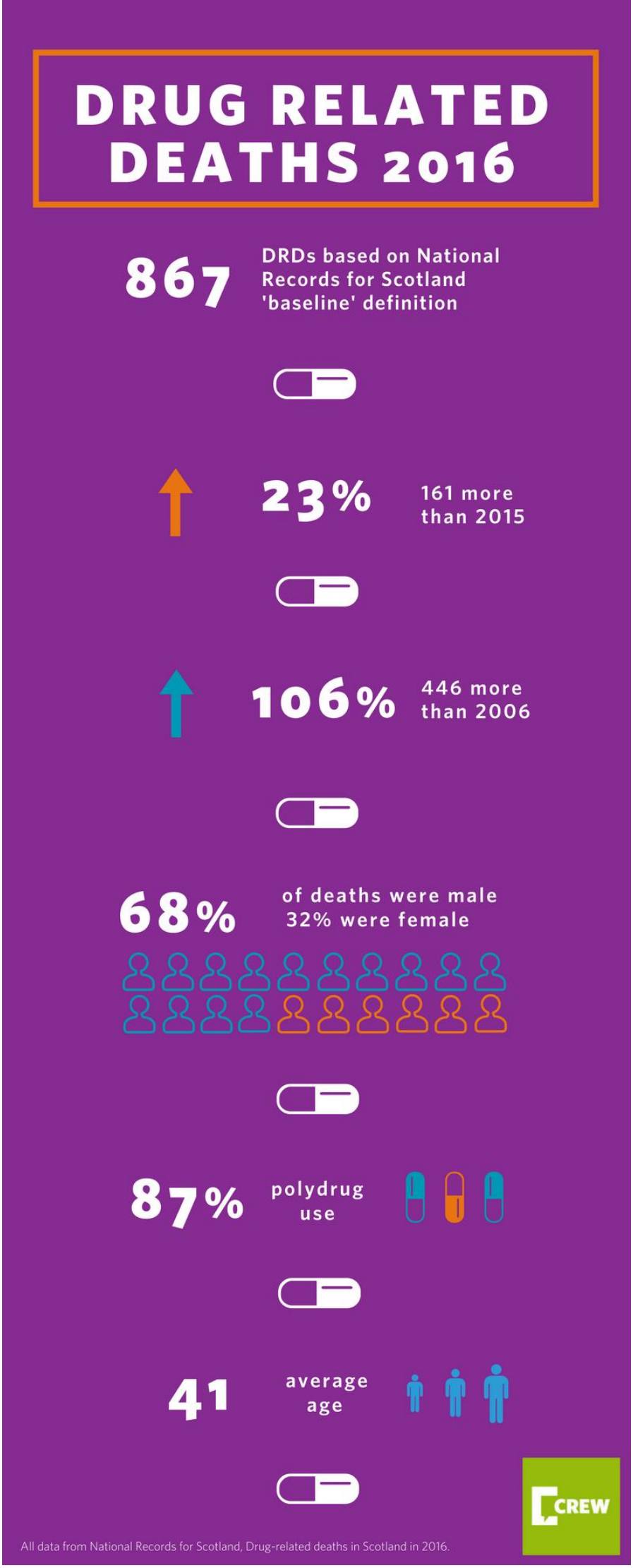


Figure 15
DRD Key Figures

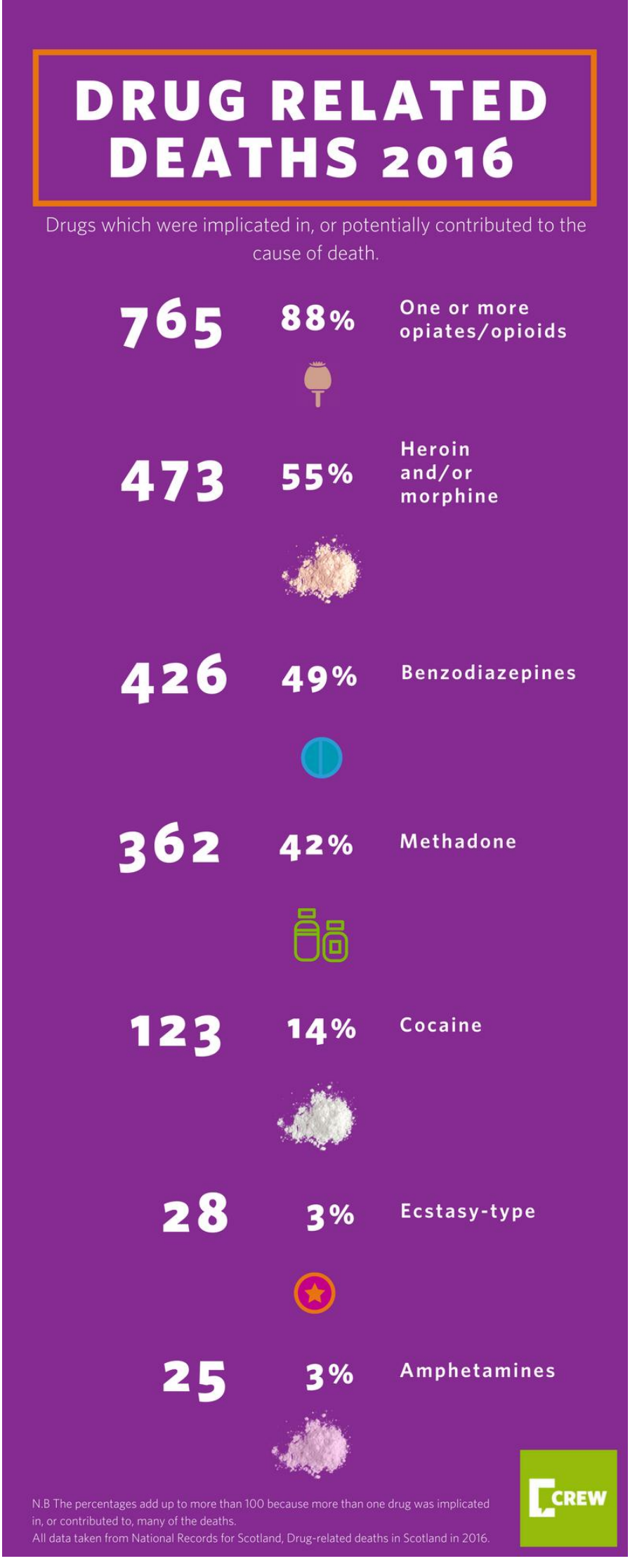


Figure 16
Types of Drug Implicated

10 POTENTIAL REASONS DRDs ARE RISING

This is a multifaceted problem involving many issues, including but not limited to:

1. Ageing population

a. Some media outlets have recently been referring to an "ageing cohort" of people who started using drugs in the 1980s and 1990s, who are now inevitably experiencing increasingly complex health issues that accompany years of drug use. Undoubtedly, this is an important part of the story but people are also ageing in the rest of the world and 28% of those who died were not born until the 1980s.
b. These people are dying prematurely, not because they are "old". The average age of a DRD is 41 which is decades below the average life expectancy in Scotland.
c. If we continue to blame the situation on the past, we will not address it in the present and future.

2. Chronic health issues

a. It is worth noting that if a person has a medical condition e.g. endocarditis and this is listed as the first cause of death by the pathologist then the death is not counted in DRD statistics, even if a controlled drug was also implicated in the cause of death.
b. Not only are people facing the result of many decades of complex health issues and inequalities but they are also suffering serious side effects from more recent damaging behaviours. Health can decline after a short period of risky drug use and health was significantly impacted by the use of available and legal NPS in Scotland.
c. The use of cigarettes and alcohol correlates with the use of illegal drugs. Their use can cause many diseases, which negatively affect health and increase the likelihood of death.
d. Scotland has also recently seen outbreaks of botulism, anthrax, hepatitis C and HIV. While deaths caused by these outbreaks are not counted as a "drug related death" they all negatively affect people's health and wellbeing.
e. Mental health comorbidity is an important issue. It makes treatment more difficult and people may find it harder to get help for their mental health if they also experience problems with drugs. They are also more likely to be on prescription drugs such as anti-psychotics, benzodiazepines and anti-depressants. Harms are exacerbated by polydrug use.

3. Inadequate support and services

a. Drug and alcohol funding is not stretched; it is completely inadequate. In 2016, in Scotland, funding for drug services was cut by 20% and a pledge that the health budget would pick up this shortfall has yet to materialise.
b. The Scottish Government naloxone program was internationally praised but has now finished, as it was only funded for five years. Responsibility for naloxone provision now sits with local health boards causing a disparity in supply.

c. Many people have never been in contact with a drug treatment service and sometime those who do access treatment are faced with multiple barriers. This is compounded by the fact that drug use is illegal and highly stigmatised.
d. In Scotland, over a million people are living in poverty, which is around 1 in 5 of the population[19]. This figure is on the rise, perhaps due to an increase in austerity, living costs and zero-hour contracts. Poverty and homelessness are risk factors for problematic drug use and investment is needed to improve the quality of life of people in Scotland.

4. Prescription drugs

a. The prescribing of many psychoactive drugs has increased. In England and Wales, the increase in deaths related to gabapentin and pregabalin was correlated highly with the increase in prescribing[20] and we would expect the same in Scotland.
b. In Scotland, we see frequent prescribing of opioids such as methadone, buprenorphine and tramadol. High doses of opioids can cause respiratory depression and death. This is particularly risky if taken in combination with a gabapentinoid, as the combination of opioids with gabapentin or pregabalin potentially increases the risk of acute overdose death through either reversal of tolerance or an additive effect of the drugs to depress respiration[20].
c. Benzodiazepines also feature highly within DRD statistics and a review of prescribing practices and benzodiazepine addiction treatment pathways is needed.
d. Pharmaceutical companies profit from the sale of medicines and may downplay some of the associated harms. Medicines are subject to clinical trials but this does not remove all risk and there is an incorrect assumption that these drugs are safe.

5. NPS and legal highs

a. The legal NPS market semi-legitimised drugs and therefore acted as a gateway for the use of other drugs.
b. Some drugs also increased in purity or decreased in price in response to competition. In 2016, Police Scotland reported that the average weight of a “tenner bag” (£10) increased from 100 mg to 150–200 mg. This means people are now getting more heroin for their money and the more drugs they have, the more they are likely to take.
c. Although a death caused by a “legal high” is not a drug related death, the extreme use of legal NPS pushed people’s bodies and minds to the extreme. The effects of many NPS were more mind-altering, addictive and more damaging than those of many illegal substances and they caused a range of health harms that reduced people’s overall health and immunity making them more susceptible to overdose.

6. The Psychoactive Substances Act (2016)

a. The implementation of new legislation, combined with enforcement actions, reduced the availability of NPS. In our 2015-2016 Annual Report, we predicted that people would subsequently switch to using the substances that were most available (Figure 7, paragraph 2). Many people that we worked with at Crew had switched from taking heroin and/or cocaine to NPS. When shops stopped selling these substances, people switched back to

other drugs. After switching to NPS, they would have a reduced tolerance to other drugs and would therefore be more likely to overdose.

7. More drugs

a. A DRD is defined as a death "where a drug listed under the MoDA was found to be present in the body at the time of death". We would expect the number of deaths from "drugs" to increase if the number of substances classed as "drugs" increase. We have more illegal drugs than before; in the last decade, over 50 drugs have been added to the MoDA. However, it is worth noting that most of these drugs are rarely implicated in DRDs, with the exception of tramadol which was controlled in 2014.

b. The "third generation" of synthetic cannabinoids were controlled in December 2016 and 16 benzodiazepines were controlled in May 2017. These updates will increase the number of deaths counted under the "baseline" definition in 2017.

c. Forensic toxicology is an increasingly complex field due to the vast number of new chemicals and drug metabolites being discovered. As scientific technologies and methods improve, this enables the detection of substances that could not be found several years ago. Detecting substances that break down rapidly in the body, or are active in the microgram range, continues to be an issue for forensic testing. Whilst the increase in 2016 DRDs has not been fuelled by fentanyl, its impact may be unreported as it is difficult to detect. Now that we are aware of its use, and have developed forensic testing standards, we are more likely to detect it and we anticipate it to be implicated in several DRDs in Scotland in 2017.

8. Lack of knowledge

a. Zero tolerance approaches prohibit harm reduction messages, so people do not have access to the information they need to make accurate decisions about their own health.

b. Some services do not have the knowledge to help, particularly as they may not have up to date knowledge on the drugs that people are taking.

9. Polydrug use

a. 87% of DRDs involved polydrug use. This issue is further compounded as the use of controlled drugs goes hand in hand with the use of alcohol, tobacco and caffeinated drinks.

b. Some drugs interact with each other, increasing the side effects. See point 4b

c. Depressants and opioids can cause respiratory depression. This is especially likely when they are taken in high doses or mixed with other drugs, particularly other depressants such as alcohol or benzodiazepines.

10. Prohibition

a. The prohibition of NPS and other drugs has fuelled the innovation of a new drugs market and it is possible that the expansion of the current prohibitive framework has driven people to take less effective and more dangerous drugs, which increases the risk of harm.

b. The illegality of drug use prevents people from getting help and causes others to stigmatise and form incorrect moral judgements on drug use. This has been exacerbated further by the introduction of the PSA.

10 THINGS WE CAN DO TO REDUCE DRUG RELATED HARM

1. Educate

a. Deliver consistent and complete early-stage education programs as a mandatory part of the school curriculum.
b. Update higher education programs to include information on psychoactive drugs.
c. Provide regular, national, continuing professional development courses to keep worker knowledge current.

2. Inform

a. Invest significantly to improve current drug information including the provision of accessible online and hard-copy materials.
b. Create national harm reduction campaigns for at-risk groups and in response to new drug trends.

3. Prevent overdose

a. Encourage people to get help in an emergency.
b. Expand basic first aid training e.g. recovery position (Figure 17).
c. Provide training and information on the signs of an overdose.
d. Continue to advertise and provide naloxone to anyone who is at risk of an opioid overdose, or anyone who may be in contact with someone who takes opioids.

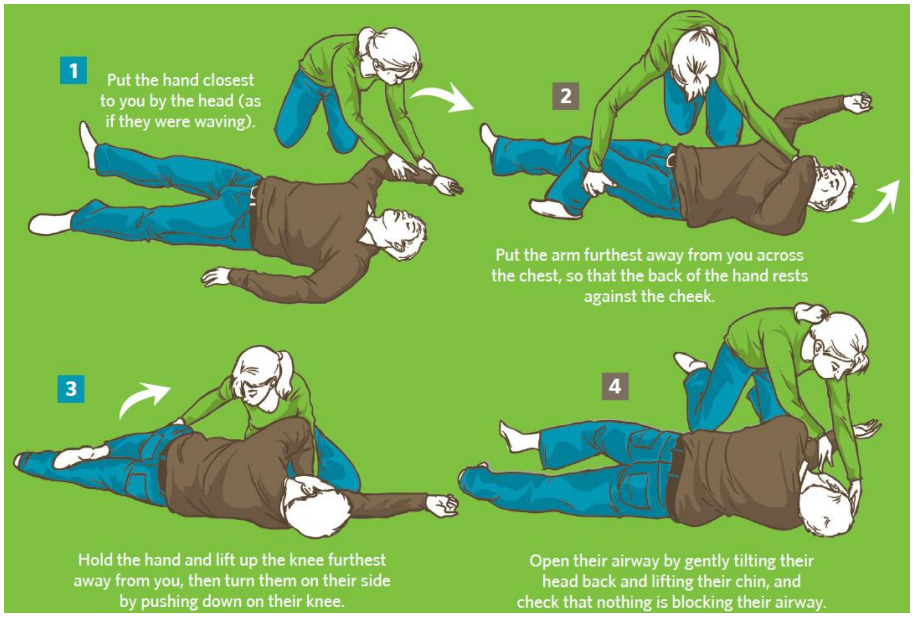


Figure 17: Recovery Position

4. Promote harm reduction

a. Consider providing more paraphernalia (in addition to foil and injecting equipment) such as glass pipes to smoke crack cocaine. This encourages attendance at services and reduces the harm caused by homemade devices.
b. Encourage alternatives to injecting.
c. Move away from zero tolerance and encourage harm reduction approaches.

d. Provide key messages regarding risk of opioids, polydrug use, dosing, routes of administration, new drugs and tolerance.

5. Adapt services

a. Significantly increase funding for drug and alcohol services. Help support the work of Crew by donating here: www.justgiving.com/crew2000/
b. Provide better pay and conditions for staff to retain talent and reduce staff turnover.
c. Avoid frequent re-tendering to ensure consistency in service provision.
d. Review prescribing practices of psychoactive drugs and provide services for those wishing to seek support regarding their problematic use of prescription drugs. While medicines have side effects and the over prescribing of drugs can cause harm, prescriptions should not be stopped without first considering that people may subsequently switch to other drugs (or illegally obtained prescription drugs) to self-medicate.
e. Expand psychosocial and talking therapies.
f. Improve mental health services and accept that drug use and mental health issues go hand in hand.
g. Reduce waiting list times for drug and mental health services.
h. Work with people on their level. Remove barriers and thresholds for treatment to encourage people to seek help as soon as possible. Communicate that abstinence is not the only option.
i. Invest in diversionary activities and other community services.
j. Fight social stigma.
k. Expand the number of preventative and brief intervention programs to reach people who would not normally go to a drug service and help people before their use becomes problematic. We should not wait until people are at their lowest before offering them help.
l. Target support to high-risk groups such as those leaving prison or police custody, those who have a history of non-fatal overdose, those with no fixed address and those with mental and physical health problems.
m. Provide support to reduce rates of smoking and drinking.
n. Avoid profit driven health care systems, as public health needs to focus on patient welfare and not companies' revenues.

6. Monitor trends

a. Establish new networks to monitor trends nationally.
b. Trend monitoring will help to evaluate the impact of health and enforcement actions and pre-empt what drugs are coming into circulation, so we are not behind on upcoming trends.

7. Test drugs

a. Provide a national, publically accessible, forensic drug testing service, which disseminates information and informs strategy.

8. Provide safe spaces

a. Open safer consumption facilities to provide a safe, clean environment for people to take drugs, seek support and engage with services.

9. Regulate

a. Update drugs legislation. The Misuse of Drugs Act was enacted in 1971; it is no longer fit for purpose, as today's drug scene has changed unrecognisably.
b. Decriminalise. There is, in general, a lack of robust evidence as to whether capture and punishment serves as a deterrent for drug use[21] but the illegality of drugs causes stigma and harm through criminalisation, and prevents people accessing support.
c. Implement drugs education projects as an alternative to criminal sanctions.
d. Consider immunity from prosecution for bystanders who call for medical help and possess illegal drugs.
e. Reschedule drugs, such as cannabis, LSD, psilocybin and MDMA, to allow research into potential health benefits and subsequent use as medicines.
f. Provide "drug assisted treatment" programs, which use a regulated form of the drug to provide therapy.
g. Seek new powers over legislation from Westminster. Scotland is culturally different from the rest of the UK and its DRDs are 2.5 times greater; a different approach is needed.

10. Invest

a. The cost of drug use to society is huge and includes (but is not limited to) expenses linked to health care, assault, robberies, theft, custody stays, legal fees, fire, vandalism, domestic abuse, reoffending, police time, housing, street cleaning and road traffic accidents.
b. The Scottish Community Safety Network's, "cost toolkit for community safety" measures preventative spending. It uses The Royal Society for the Prevention of Accidents 2010 Home Accident Report to calculate that one "home accidental fatality" costs £1,611,400[22]. DRDs have a high cost to society; not only in terms of the loss and grief they cause but also in financial terms, as the calculated cost would be over 1.3 billion pounds. In comparison, harm reduction interventions such as the provision of safer use equipment, access to forensic testing, monitored consumption facilities, provision of welfare at festivals and events and access to 1-to-1 brief interventions are relatively low cost public health solutions.
c. Preventative spending can decrease the amount of problematic drug use, reducing the cost to society. Society will also benefit from people working more productively as a result of experiencing fewer drug related harms.
d. Preventing drug related harms, including death, costs less money overall but it does require reinvestment and reallocation of resources.

DRD CONCLUSIONS

The 2016 drug related death statistics show the devastating reality of social care in Scotland. Scotland pioneered innovative and legacy building approaches in response to the HIV crisis in the 1980s and we hope that today these figures encourage change and result in an urgent transformation of drug and other health care strategies.

Note: *Since this report was written the Scottish Government announced new funding for drug and alcohol services. The Government's Programme for Scotland (A Nation with Ambition) was published in September 2017 and states that the government "have begun an overhaul of drug strategy, guided by a principle of ensuring the best health outcomes" and that they will, in 2017, "invest an additional £20 million in alcohol and drug services".*

In conclusion, the Psychoactive Substances Act (2016), combined with targeted enforcement action, has reduced the sale and use of NPS in Scotland. However, the Act was a standalone gesture and while some people stopped taking NPS, some continued and others simply changed to another method of enhancement or escape.

The harms caused by psychoactive drug use continue to be exacerbated by the lack of a realistic, rational and fully funded strategy that considers not only recovery but also the wider impacts and drivers of drug use, and an update to legislation.

We are often both saddened and overwhelmed in our daily work, trying to reduce drug related harm amidst an urgent health and social-care funding crisis and we anticipate that 2017 DRD statistics will be just as tragic. Urgent change is needed.

We can work together to change this situation but not without significant reform and investment. If we invest in services, increase preventative spending and redirect our resources to education and harm reduction, we can improve our health whilst saving money in the long run.

In Scotland, we anticipate the use of most drugs will continue and the use of stimulants, MDMA, synthetic opioids and pharmaceuticals will increase. Future trends will be driven by ease of production and availability.

The impact and emergence of NPS has been a learning experience and although some enjoyed the legal market, others experienced harms that will take a lifetime to heal. The threat has not been eliminated; it has simply evolved as new and potent drugs continue to be manufactured. We should study the impact that an unregulated legal drug market can have and consider these issues carefully when looking to improve UK drug policy.

CREW

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ANNEX 2 – FURTHER READING AND SOURCES OF HELP

Crew | Drug information and advice | www.crew2000.org.uk | www.mindaltering.co.uk | 0131 220 3404

MY CREW | Drugs information | www.mycrew.org.uk

Worker booklet | Crew's Psychoactive Drug Booklet

Blue Light | Information forum | www.bluelight.org

Bunk Police | Substance testing | www.bunkpolice.com

DrugWise | Evidence based drugs info | www.drugwise.org.uk

DrugWatch | SCRA and fentanyl sheets | www.thedrugswheel.com/?page=resources

Erowid | Education and harm reduction resource | www.erowid.org

Global Drug Survey | World's biggest drug survey | www.globaldrugsurvey.com

Drugs Meter | Feedback on your drug use | www.drugsmeter.com

Know the Score | Info and support | www.knowthescore.info | 0800 587 5879

Mental Health Services | www.wellscotland.info/about/partners/useful-contacts

Mentor UK | Children and young people | www.mentoruk.org.uk

NEPTUNE | Clinical guidance | www.neptune-clinical-guidance.co.uk

Release | Drugs and the law | www.release.org.uk

Scottish Drug Services Directory | www.scottishdrugservices.com

Scottish Drugs Forum | www.sdf.org.uk | 0141 221 1175 | 0131 221 1556

Scottish Families Affected by Drugs | www.sfad.org.uk | 0808 010 1011

Scottish Recovery Consortium | www.scottishrecoveryconsortium.org | 0141 552 1355

SMART Recovery | Recovery training | www.smartrecovery.org.uk

The Drugs Wheel | Model for substance awareness | www.thedrugswheel.com

Transform | Drug regulation and control | www.tdpf.org.uk

TripSit | Harm reduction and support | www.tripsit.me

Understanding the patterns of use, motives, and harms of **New Psychoactive Substances in Scotland Report** | http://www.sdf.org.uk/wp-content/uploads/2017/03/Understanding-the-Patterns-of-Use-Motives-and-Harms-of-New-Psychoactive-Substances-in-Scotland-Full-Report.pdf