DRUG & ALCOHOL
ACTION TEAM
Cornwall and Isles of Scilly
Promoting Recovery

DRUG RELATED DEATHS REPORT

CONCERNING THE MONITORING OF AND THE CONFIDENTIAL INQUIRIES MADE INTO DRUG RELATED DEATHS WITHIN CORNWALL & THE ISLES OF SCILLY

1st January 2017 to 31st December 2017

CONTENTS

EXECUTIVE SUMMARY

This is the fifteenth annual report concerning drug related deaths prepared by the Cornwall and Isles of Scilly Drug and Alcohol Action Team (DAAT). The 2017 report is based on the period from 1st January 2017 to 31st December 2017 inclusive. The report follows the requirements by the Department of Health and the Home Office for all Drug and Alcohol Action Teams to have in place a system of recording and conducting confidential inquiries into all drug related deaths within their specific areas.

The report adheres to the agreed definition of a drug related death as used by The Home Office, all 43 Police Forces within England and Wales, all Drug and Alcohol Action Teams, all Health Authority areas and the Department of Health; '*deaths where the underlying cause is poisoning, drug abuse or drug dependence and where any of the substances listed in the Misuse of Drugs Act 1971, as amended, are involved'.*

The table below illustrates the yearly variance of drug related deaths in Cornwall between 2013 and 2017;

	2013	2014	2015	2016	**2017**
Total DRD's	18	17	24	32	**26**
Gender	17 M 1 F	15 M 2 F	21 M 3 F	25 M 6 F	**21 M 5F**
% Change	28% decrease from 2012	6% decrease from 2013	41% increase from 2014	33% increase from 2015	**19% decrease from 2016**
Heroin / Morphine present	12 (9 Heroin & 3 Morphine)	11	14 (12 Heroin & 3 Morphine)	18 x Heroin, 2 x Morphine	**15 x Heroin, 1 x Morphine**
Methadone present	5 (all illicit- 3 of the deaths where methadone is a significant factor)	5 (3 x prescribed & 2 illicit) 1 of the illicit in combination with lethal levels of prescribed meds	5 (3 x prescribed, 2 illicit) 1 of the illicit where methadone caused death i/c alcohol	5 (4 prescribed & 1 illicit- all in combination with other drugs/ alcohol)	**13 (10 prescribed, 3 illicit- all in combination with other drugs/ alcohol)**
Other CD significantly present	1 x DHC 1 x MDMA 1 x prescribed Fentanyl & Oxycodone	0	3 x MDMA (includes 1 x poly drug) 1 x Subutex 1 x NPS	2 x Cocaine 2 x NPS 1 x Amphet,	**1 x Cocaine, 1 x MDMA & Ketamine, Many x poly drug**

The main points from this report for 2017 are summarised below;

- The reduction in drug related deaths for 2017 in Cornwall bucks the trend of the national picture with a reduction of 19% for 2017 as compared to 2016
- 21 people (81%) died in Cornwall in 2017 from a drug related death that involved an opiate drug (15 heroin and 1 morphine but this also includes 5 methadone cases where this is the only opiate present irrespective of being prescribed or illicit).
- The 40 to 49 age group had the highest rate of drug related deaths. 11 people in Cornwall were in this age range representing 42% of the total deaths.
- Heroin deaths have decreased to 15- a reduction of 17%.

- Cocaine features in 11 of the deaths representing 42% of the total. It is the only drug to feature in a drug related death this year where it is the sole agent and primary contributor to the death.

- 15 cases (58%) feature the presence of an anti-depressant medicine such as Sertraline or Mirtazapine. Mental ill health is a pervading feature of drug related deaths.

- 14 cases (54%) feature the presence of the benzodiazepine drug Diazepam.

- 16 cases (61.5%) do not have any alcohol present, 3 cases (11.5%) have levels of alcohol where there has been a significant contribution to the death and 7 cases (27%) have alcohol presence due to post-mortem change and/or in low levels.

- 25 cases (96%) feature more than one substance being present and contributing to the death- this includes alcohol. Many cases feature a wide range of substances with synergistic action often being the cause of death.

- Gabapentinoid drugs such as Pregabalin in the main, but also Gabapentin have seen another rise in their use. There is a known link between these drugs and misuse with 12 of the cases (46%) having them present- a rise of 15% from last year. 9 of the cases see the combination of Gabapentinoids with Heroin where the potentiating effect of the Gabapentinoids is a factor in the deaths.

- Alprazolam, being 10 times more powerful than Diazepam has featured in 3 cases (11.5%) rising from 6% last year. This drug has been illicitly sourced in all of these cases and is not available from the NHS. The drug has not been previously seen or recorded in records kept by the DAAT.

- 17 people died whilst being in current drug treatment and one died after being out of treatment for one month. This represents 69% of the total deaths and is a rise from 47% in treatment in 2016.

- 4 of the deaths involved people who were homeless albeit 3 of them died in premises.

- In general the people succumbing to a drug related death are becoming more complex in their presenting issues intertwined with their drug and alcohol issues. Some of the factors included in this complexity are adverse childhood experiences, drug use combined with physical and/ or mental health issues, more complex drug interactions leading to heart arrhythmia and the number of people linked to drug/alcohol use who take their own lives. A notable number of cases involve people who have serious underlying medical issues which have either been brought on by or exacerbated by drug and alcohol use.

1. INTRODUCTION

1.1 This is the fifteenth annual report concerning drug related deaths prepared by the Cornwall and Isles of Scilly Drug and Alcohol Action Team (DAAT). The 2017 report is based on the period from 1st January 2017 to 31st December 2017 inclusive. The report follows the requirements by the Department of Health and the Home Office for all Drug and Alcohol Action Teams to have in place a system of recording and conducting confidential inquiries into all drug related deaths within their specific areas.

1.2 The report adheres to the agreed definition of a drug related death as used by The Home Office, all 43 Police Forces within England and Wales, all Drug and Alcohol Action Teams, all Health Authority areas and the Department of Health; '*deaths where the underlying cause is poisoning, drug abuse or drug dependence and where any of the substances listed in the Misuse of Drugs Act 1971, as amended, are involved'.*

1.3 This report has been compiled to look at issues that have arisen from drug related deaths and associated learning. The guidance, advice and reporting contained in the below-listed publications has steered this report and attached hyperlinks can take the reader to the full documents;

- Office For National Statistics 2016 report published August 2017- 'Deaths related to drug poisoning in England and Wales: 2016 registrations' https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsrelatedtodrugpoisoninginenglandandwales/2016registrations

- Routine Enquiry about Adverse Childhood Experiences Implementation pack pilot evaluation (final report) published May 2018 https://www.gov.uk/government/publications/routine-enquiry-about-adverse-childhood-experiences-implementation-pack-evaluation

- Take- Home Naloxone For Opioid Overdose In People Who Use Drugs (Updated version July 2017)- Advice for local authorities and local partners on widening the availability of naloxone to reduce overdose deaths from heroin and other opiate drugs. http://www.nta.nhs.uk/uploads/phetake-homenaloxoneforopioidoverdoseaug2017.pdf

- Health Matters: Preventing Drug Misuse Deaths (Updated September 2017) https://www.gov.uk/government/publications/health-matters-preventing-drug-misuse-deaths/health-matters-preventing-drug-misuse-deaths

- Understanding and Preventing Drug-Related Deaths - The report of a national expert working group to investigate drug-related deaths in England. (August 2016) http://www.nta.nhs.uk/uploads/phe-understanding-preventing-drds.pdf

- Improving Clinical Responses To Drug- Related deaths- A summary of best practice and innovations from drug treatment providers.(August 2017) http://www.collectivevoice.org.uk/wp-content/uploads/2017/08/Improving-clinical-responses-to-DRDs-August-2017.pdf

1.4 According to the most recent report from The Office for National Statistics (ONS) published in August 2017*, there were 3,744 drug poisoning deaths involving both legal and illegal drugs in England and Wales registered in 2016; this is 70 higher than 2015 (an increase of 2%) and the highest number since comparable statistics began in 1993. Of these 3,744 deaths, 69% (2,593) were drug misuse deaths (the definition of drug misuse deaths here being the same definition as in paragraph 2 above). The reports other main headlines were:

- There has been an increase in the rate of deaths related to drug misuse in Wales from 58.3 deaths per 1 million population in 2015 to 66.9 per 1 million in 2016; deaths in England have remained comparable between 2015 and 2016.
- People aged 40 to 49 years had the highest rate of drug misuse deaths in 2016, overtaking those aged 30 to 39 years.
- Over half (54%) of all deaths related to drug poisoning in 2016 involved an opiate (mainly heroin and/or morphine).

- The highest mortality rate from drug misuse was in the North East with 77.4 deaths per 1 million population, a 13% increase from 2015; the lowest rate (29.1 deaths per 1 million population) was in the East Midlands, which remained stable.

*In relation to the ONS report the below caveat must be considered- '*In England and Wales, almost all drug-related deaths are certified by a coroner following an inquest. The death cannot be registered until the inquest is completed, which can take many months or even years, and we are not notified that a death has occurred until it is registered.*

In common with most other mortality statistics, figures for drug-related deaths are presented for deaths registered in a particular calendar year, rather than deaths occurring each year. This enables figures to be published in a timelier manner, but can make the trends more difficult to interpret, especially for smaller geographical areas.

Out of the 2,593 deaths related to drug misuse registered in 2016, just under half (1,221) occurred in years prior to 2016'.

1.5 There is much to be learned by investigating drug related deaths and the dissemination of that learning needs to be rapid and insightful. Each case that has been investigated and taken through to inquest covered by this report has presented its own unique set of circumstances and associated learning. Case specific learning is addressed dynamically so that the benefits can be immediately felt by all relevant parties and agencies. The cases in question can be found later in this report.

1.6 The figures concerning drug related deaths published by the Cornwall & IOS DAAT are seen as consistently accurate. This report contains a summary of investigations and recommendations which would not have been possible without an open, robust and efficient working relationship with many partner agencies and personnel. These partners include Addaction, Bosence/ Boswyns rehabilitation and detox unit, Devon and Cornwall Police, HM Prison Service, HM Coroner and her officers, SW Ambulance Service, Probation Service and supported housing projects. Cases often involve interaction with toxicologists, pathologists, pharmacists and GP's. The information and data, efficiency of various agency meetings and communication allows the DAAT the confidence to deliver an accurate annual report.

1.7 This current report incorporates all reported suspected drug related deaths throughout Cornwall & IOS for 2017 and has been prepared for the information of the Cornwall & IOS Drug Related Deaths Review Group and for the Peninsula Drug Related Deaths Review Panel. The report is also for the information of the DAAT Board and Cornwall Council (Public Health), together with HM Coroner for Cornwall. Thereafter copies will be circulated to commissioned providers and DAAT partners.

2. RECORDED DRUG RELATED DEATHS – Cornwall & IOS 2017

2.1 Total deaths 2013- 2017

	2013	2014	2015	2016	**2017**
Total DRD's	18	17	24	32	**26**
Gender	17 M 1 F	15 M 2 F	21 M 3 F	25 M 6 F	**21 M 5F**
% Change	28% decrease from 2012	6% decrease from 2013	41% increase from 2014	33% increase from 2015	**19% decrease from 2016**
Heroin / Morphine present	12 (9 Heroin & 3 Morphine)	11 Heroin	14 (12 Heroin & 3 Morphine)	18 x Heroin, 2 x Morphine	**15 x Heroin, 1 x Morphine**
Methadone present	5 (all illicit- 3 of the deaths where methadone is a significant factor)	5 (3 x prescribed & 2 illicit) 1 of the illicit in combination with lethal levels of prescribed meds	5 (3 x prescribed, 2 illicit) 1 of the illicit where methadone caused death i/c alcohol	5 (4 prescribed & 1 illicit- all in combination with other drugs/ alcohol)	**13 (10 prescribed, 3 illicit- all in combination with other drugs/ alcohol)**
Other CD significantly present	1 x DHC 1 x MDMA 1 x prescribed Fentanyl & Oxycodone	0	3 x MDMA (includes 1 x poly drug) 1 x Subutex 1 x NPS	2 x Cocaine 2 x NPS 1 x Amphet,	**1 x Cocaine, 1 x MDMA & Ketamine, Many x poly drug**

The reduction in drug related deaths for 2017 in Cornwall bucks the trend of the national picture with a reduction of 19% for 2017 as compared to 2016.

The drug related deaths for 2017 in Cornwall involve 21 people who have taken opiates (mainly heroin and morphine but includes 5 cases where methadone is the only opiate present irrespective of whether prescribed or not). This represents 81% of the total and is in comparison to the most recent national statistics where 54% involved opiates.

2.2 Male deaths 2013- 2017

	2013	**2014**	**2015**	**2016**	**2017**
Total Drug Related Deaths	18	17	24	32	**26**
Males	17 (94%)	15 (88%)	21 (87%)	25 (78%)	**21 (81%)**
Mean age	35	40	40	40	**41.6**
Youngest	2 x 21	27	2 x 25	21	**19**
Oldest	58	61	63	62	**62**
Spread of ages	20's- 5 30's- 7 40's- 2 50's- 3	20's- 2 30's- 6 40's- 5 50's- 1 60's- 1	20's- 4 30's- 7 40's- 5 50's- 3 60's- 2	20's- 6 30's- 6 40's- 7 50's- 5 60's- 1	**teens-1** **20's- 3** **30's- 5** **40's- 7** **50's- 3** **60's- 2**
Heroin/ Morphine	9 x Heroin, 2 x Morphine	10 x heroin	12 x Heroin 1 x Morphine	14 x Heroin 2 x Morphine	**13 x Heroin** **1 x Morphine**

Methadone significant and/ or present	7 (5 x illicit- 2 in combination heroin, 2 i/c alcohol, 1 i/c poly drug) & (2 x prescribed both in combination heroin)	5 (1 x illicit in combination prescribed meds) & (4 prescribed- 1 O/D i/c meds, 1 i/c illicit pregabalin and alcohol, 1 i/c heroin, 1 i/c alcohol)	5 (2 x illicit methadone- 1 in combination alcohol, 1 in combination heroin) & (3 prescribed- 1 diabetes related, 2 in combination heroin)	5 (4 prescribed & 1 illicit- all in cor with other drugs/ alcohol)	**10** **(9 prescribed, and 1 illicit- all in combination with other drugs and/ or alcohol**)
Other controlled drug significantly present	1 x DHC, 1 x MDMA, 1 x Oxycodone & Fentanyl	0	1 x MDMA, 1 x NPS- New Psychoactive Substance, 1 x Buprenorphine (Subutex)	2 x Cocaine, 1 x NPS, 1 x Amphetamine	1 x Cocaine 1 x MDMA & Ketamine
Treatment	6 drugs	14 (9 drugs and 3 alcohol)	10 (9 drugs and 1 alcohol)	12 drugs	**13 drugs** **1 Alcohol**
Treatment within 6 months of death or treatment referred/offered but never commenced (New category for 2014)	2 drugs	2 (1 drugs and 1 alcohol)	3 (2 drugs and 1 alcohol)	1 drugs	**1** **(1 drugs OOT for 1 month)**

2.3 Female deaths 2013- 2017

	2013	2014	2015	2016	**2017**
Total Drug Related Deaths	18	15	24	32	**26**
Females	1 (6%)	2 (12%)	3 (13%)	7 (22%)	**5 (19%)**
Mean age	58	32	40	32	**41**
Oldest	58	34	49	55	**45**
Youngest	58	30	32	15 months	**32**
Heroin/ Morphine	1	1 x Heroin + NPS + medical issues	1 (awaiting inquest but medicine containing morphine was prescribed)	4 x Heroin	**2 x Heroin**
Methadone	0	1 x tramadol, pregabalin & illicit methadone	0	0	**3** **(1 x prescribed 2 x illicit)**
Other controlled drug significantly present	0	0	1 x combination of MDMA and medical issues 1 x MDMA and multiple prescribed meds	1 x Fentanyl, 1 x NPS, 1 x multiple combination of medicines	**0**
Treatment	0	1	0	2	**3 drugs**

2.5 The average age of males dying from a drug related death during 2017 has risen very slightly to 41.6 having seen a previous three year average of 40. Males represent 81% of the total number of deaths (21 out of the total of 26) which has increased from 2016 at 78% (25 out of the total 32). Female deaths have decreased to 5 for 2017 from 7 in 2016. Whilst it is encouraging to see any reduction in the number of deaths, the numbers of female deaths are relatively small compared to the male deaths.

2.6 Cornwall figures agree with the most recent national figures in that the 40 to 49 age group had the highest rate of drug related deaths. 11 people in Cornwall were in this age range representing 42% of the total deaths.

2.7 Deaths from heroin toxicity or where heroin has been implicated in the death, have decreased from 18 in 2016 to15 for 2017- a decrease of 17%. All these heroin related deaths also involve poly drug use to a greater or lesser degree. Whilst there has been a drop in the number of cases in 2017 where heroin has been a factor, the percentage of deaths where it has been a factor for both 2016 and 2017 remains at 56% of the total number of drug related deaths.Where heroin is present in toxicology the death will be reported as a heroin death. There will be occasions, however, where the level of heroin is low and the deceased had high tolerance to opiates. The death may have been due to the synergistic action of other drugs that were present in more significant levels but we are unable to ascertain the finer detail of drug interactions for this report so the particular death will be reported as related to heroin. The poly drug use is either heroin plus other illicit drugs and/ or alcohol or a combination with lawfully prescribed medicines. As a general trend from 2013 the percentage of heroin related deaths have steadily risen to the last 2 years figure of 56%- 2013 (50%), 2014 (65%), 2015 (50%), 2016 (56%), 2017 (56%).

2.8 Deaths from methadone toxicity or where it has been implicated in the death, have risen by 160% to 13 deaths. Of the 13 deaths in 2017, 10 are in cases where methadone has been present due to having been lawfully prescribed with 3 cases having involved illicitly sourced methadone. All of these deaths involve poly drug use with 69% of the total number of drug related death cases involve a person being in treatment accounting for a larger than normal presence of methadone.

2.9 Cocaine* once again has risen in prominence in drug related deaths with 11 out of the 26 cases showing its presence. This represents 42% of all drug related deaths in 2017 where cocaine has been a feature. Cocaine is the only drug to feature in a drug related death this year where it is the sole agent and primary contributor to death. 2016 saw 31% of cases involve cocaine which was 10 out of the 32 cases.
*Toxicology only indicates cocaine and its metabolites so where a person has used crack cocaine only cocaine metabolites are indicated. The intelligence picture is that crack cocaine use is on the rise and some of the cases from 2017 have circumstantial evidence that crack cocaine had been used by the deceased.

2.10 15 cases show the presence of one or more anti- depressant medicines such as Sertraline or Mirtazapine. These cases may or may not feature Diazepam. Diazepam features in 14 cases with some overlap between the anti- depressant medicine cases. Whilst these medicines can be useful in the treatment of mental health disorders such as anxiety and depression, they can act synergistically to enhance the toxic effects of other drugs on the cardiorespiratory system. The table at 2.13 on page 10 shows the number of cases where individual medicines have been present as identified in toxicological analysis.

2.11 Three cases (11.5%) involve significant levels of alcohol being present in the toxicology. Whilst the level of alcohol in each of these cases could have been independently fatal in some, they occurred in cases where the deceased had regularly consumed large amounts of alcohol and, therefore, had tolerance to alcohol. Each case involved the synergistic action of the alcohol with other drugs. 16 cases (61.5%) involved no alcohol at all with the remaining 7 cases (27%) involving alcohol at insignificant or light use level only- some of these cases involved post-mortem changes accounting for the alcohol presence.

2.12 Poly drug use or synergistic interaction between drugs/ alcohol has been one of the main findings within toxicology with only one of the cases for 2017 involving a single agent being cited as the cause of death. This case was a cocaine overdose and death. The table below at

2.13 shows the main drugs that have been significant in the relevant cause of death. Apart from one case In 2017 where there has been a sole agent present which caused the death- one of the male deaths involving cocaine- all other deaths have involved at least 2 substances. It would be lengthy and unpractical to list all these substances against each set of circumstances but the below table shows the full list of substances present in toxicology. Many of the deaths in 2017 have involved comments from the toxicologist and pathologist highlighting the synergistic effects of drugs upon the body. An example of the difficulty in being definite about which substance has been the most significant in a death is where a person has been on a methadone prescription, has been using heroin for a long period and has built up a tolerance to opiates. On top of those drugs the person may have consumed alcohol, had other illicit drugs and/ or lawful medicines. It may be in these circumstances that the exclusion of the heroin may have made no difference to the outcome but the combination of drugs/ alcohol is too complex to show that one particular drug has caused the death.

2.13

Substance	All cases	Male	Female
Alcohol			
Alcohol present/ insignificant	7	6	1
Alcohol present/ significant (above 200 mg/ 100ml)	3	3	0
No alcohol present	16	12	4
Illicit drugs, controlled drugs (Misuse of Drugs Act 1971) and other substances			
Heroin	15	13	2
Methadone	13	10 (9 prescribed & 1 illicit)	3 (1 prescribed & 2 illicit)
Cocaine	12	10	2
Cannabis	5	5	0
Amphetamine	4	4	0
MDMA/ MDA (Ecstasy)	3	3	0
Morphine	1	2	0
Ketamine	1	1	0
Mephedrone	1	1	0
Volatile substance (gas)	1	1	0
Other drugs (Medicines Act 1968)			
Alprazolam	3	3	0
Amitriptyline	2	2	0
Citalopram	2	1	1
Diazepam	14	11	3
Fentanyl	1	1	0
Fluoxetine	2	2	0
Mirtazapine	5	5	0
Pregabalin	12	10	2
Quetiapine	1	1	0
Sertraline	1	1	0
Trazodone	1	1	0
Venlafaxine	2	2	0
Zopiclone	1	1	0

2.14 Gabapentinoid type drugs such as Pregabalin and Gabapentin are now known for their abuse potential and prescribing of these drugs has been noticeably increasing borne out in part by their presence in toxicology. The 2016 report showed that, in the main, the presence of Pregabalin and Gabapentin in toxicology screens had been in cases where lawful supply had been apparent albeit in some cases that the drugs had been consumed other than in accordance with the prescription. These drugs featured in 10 of the cases (31%). The cases for 2017 show that 12 of the 26 deaths have Gabapentinoids present which represents a proportional increase to (46%). 5 of the cases involve Pregabalin being taken in amounts far exceeding the prescription. 9 of these 12 cases have seen Pregabalin/ Gabapentin in combination with heroin of which there is widespread knowledge now that Pregabalin in particular is sought for its potentiating affect upon heroin. This situation throws into question the lawful prescription of gabapentinoids and the abuse or over-use potential of the drugs. These drugs and their tendency to show up in drug related deaths and overdose situations may require increased awareness work to be carried out with a range of agencies.

2.15 Alprazolam, mainly marketed under the trade name of Xanax, is a potent, short-acting benzodiazepine drug which is not available on the NHS and only lawfully available in the UK with a private prescription. It is 10 times more powerful than Diazepam and is becoming more sought after in the illicit market intelligence suggests. 3 cases from 2017 (11.5%) feature the presence of Alprazolam and at a level that has been significant in the deaths. This compares to 2 cases (6%) from 2016. Prior to this alprazolam was not seen in toxicology although all records since 1999 have not been interrogated. The drug in these cases is believed to have been internet sourced. Alprazolam is not specifically mentioned in the latest version of the ONS report.

2.16 In 2017 there have been 16 cases where the deceased was in drug treatment at death, one case where the person was in alcohol only treatment and one case where the person died within 6 months of leaving treatment representing 69% of the total number of drug related deaths. Some of these cases also had an alcohol treatment element to them as well. The remaining *8 cases had either no link to drug treatment at all or were outside of the 6 month period.

*Of these 8 cases one person was out of treatment for 7 months, one person had been out of treatment for over 2 years and the one person had self-referred in to drug treatment one week before he died and this man had previous limited contacts with local treatment. He was due to have his first appointment on the day he died. The below table at 2.17 illustrates the proportion of those in treatment from 2013.

2.17

	2013	2014	2015	2016	**2017**
Total drug related deaths (cases in treatment or within 6 months of treatment)	18 (8)	17 (15)	24 (14)	32 (15)	**26 (18)**
In current drug treatment	6	10	10	14	**16**
Died within 6 months of leaving drug treatment	2	1	2	1	**1**
In current alcohol treatment	0	3	1	0	**1**
Died within 6 months of leaving alcohol treatment	0	1	1	0	**0**
Not known to treatment	10	2	10	17	**8***

2.18 Drug treatment teams are noticing the increased complexity of service users with some of the below factors being apparent in combination with some of the aforementioned findings;

- Drug use combined with physical medical issues such as COPD, cancer and age related conditions exacerbated by drug/ alcohol use or the substances bringing on early onset symptoms. One example of this in 2017 combines this and the next bullet point and is the case of a 43 year old woman who had a long history of drug and alcohol use as well as associated treatment. She had been diagnosed with COPD, anxiety, depression and only weighted 8 stone at death. The inquest heard evidence of how she had prematurely aged and her body had worn out.
- Drug use combined with mental health issues such as depression, anxiety, personality disorder. The table at para 2.13 on page 10 illustrates the number of drugs present in toxicology which have been prescribed for mental health conditions.
- Adverse childhood experience (ACE). Many cases involve a service user disclosing past trauma as a child so the Routine Enquiry into Adversity in Childhood (REACh) model is now in use within Addaction for example. A link to an evaluation of the findings from a pilot of an implementation pack to support routine enquiry about adverse childhood experiences can be found on page 5 of this report. ACE's are described in this linked document as*; 'A wide range of stressful events that children can be exposed to whilst growing up. While the types of adversities defined as ACEs may vary across contexts, typically, they include harms that affect the child directly, such as neglect and physical, verbal and sexual abuse; and harms that affect the environment in which the child lives, including exposure to domestic violence, parental separation or divorce, or living in a home with someone affected by mental illness, substance abuse, or who has been incarcerated. A study across England estimated that 47% of adults have experienced ACEs (Bellis et al, 2014)'.*
- Cases where heart arrhythmia is a possible factor, if not specifically identified as such within the inquest, appear to be on the increase. DAAT records go back to 1999 but the prominence and possible effects of drugs which can interfere with the hearts natural rhythm have not been looked at until recently. These drugs include methadone, citalopram, cocaine, amphetamine, MDMA, risperidone, quetiapine and amitriptyline as well as the effect that a sudden cessation of alcohol consumption may have in cases where the cause of death has been given as sudden unexpected death in alcohol misuse (SUDAM). Of the 26 drug related deaths in 2017 a total of 17 (65%) have featured drugs such as those listed above- 8 cases (30%) where methadone and at least one other drug that interferes with the heart is present and 9 cases (35%) where no methadone is present but other drugs that interfere with the heart are present.
- Complex service users succumbing to a death by suicide. Whilst these cases are counted separately and do not feature in this report, the link between issues in a drug related death and a suicide is inextricable.

2.19 Examination of the venues where these deaths have occurred reveals the following;

- Home address- 13
- Home address of another- 2
- Hospital after an overdose at home address or other address- 4
- Hospital other- 2 (includes holidaymaker & collapse in street)
- Car- 1
- Supported accommodation- 1
- Street - 1
- Supermarket toilets- 1
- Hotel/ Motel- 1 (recently been evicted from home address so only in premises for 5 days)

The home address of the subject, home address of related others or addresses that could be considered for the time being as the home address such as supported accommodation are the venue where most risk is apparent in these cases. This has been the theme for many preceding years with overdose deaths in public toilets, for example, being significantly lower as a percentage.

2.20 A breakdown of which area these deaths occurred in, denoted by the nearest town, is as follows:

- Liskeard- 4
- Truro- 4
- Falmouth- 3
- Newquay- 2
- Bodmin- 2
- Camborne- 2
- Penzance- 2
- St Austell- 2
- Looe- 1
- Padstow- 1
- Saltash- 1
- Torpoint- 1
- Bude- 1

3. BRIEF CIRCUMSTANCES/CASE STUDIES 2017

3.1 Seven of the 26 suspected drug related deaths in 2017 are awaiting inquest hearing by H.M. Coroner for Cornwall - Dr. E. E. Carlyon. Requests have been made following previous DAAT annual reports to include brief details of the individual circumstances regarding places of death, (i.e. public toilets etc), levels of care, treatment of the deceased and the combination of drugs and other substances or other material considered to have caused death. There follows a brief summary of all 26 deaths with lessons learned;

3.4 **Drug Related Death 1 – Jan 2017**

- 35 year old male who was found deceased in the back of a van in the Saltash area having been reported as missing from another part of Cornwall 3 days previous.
- He had a large amount of cannabis and cocaine in his possession and did not have a drug treatment history.
- Cause of death given as 1a. Acute cocaine toxicity and the inquest concluded that this was a drug related death.
- No third party involvement.

Findings and applying the learning

- No obvious learning from this case. The level of cocaine metabolites in the blood of this man was 25 times the lethal range.

3.5 **Drug Related Death 2 – Mar 2017**

- 43year old male who died at the home of another in the Camborne area. He was being transitioned from drug treatment in Plymouth to Cornwall and was still in receipt of a methadone prescription from Plymouth although he had not engaged with Cornwall services.
- Cause of death was given as 1a. Poly drug toxicity with a drug related death conclusion at inquest.
- It appears that this man was homeless and was using whatever houses he could to sleep. The premises where he died was one where drug taking is known to go on so he was amongst like-minded individuals when he died. Naloxone was used by someone at the premises but the exact timing and circumstances are not known.
- The case notes clearly state that this man only wanted a substitute prescription from Cornwall services and wanted no other treatment or interventions with them. This seriously limited the options available for treating this man had he lived.
- This man had reported to his GP that he had an alcohol related seizure and this would have been just over a week before he died. There was no alcohol present in the toxicology so it was surmised at inquest whether he had another seizure as he limited his alcohol intake from what was a number of years consuming much alcohol.
- Three drugs consumed which increase cardiac arrhythmia noted by the toxicologist.

Findings and applying the learning

- The timing of this death was when he was between services but had been in contact with the service taking him over. His ultimatum to them however limited their ability to work with him and he died shortly after coming to Cornwall.
- This is a case where there appears to be more of an arrhythmia issue with the type of drugs present as opposed to the quantity and type such as a heroin overdose. This is borne out by the conclusion of the toxicologist; '*Although none of the concentrations are high and so would be unlikely to cause death alone, the combination of the sedatives, (diazepam, methadone, pregabalin), in combination with those drugs which increase cardiac arrhythmias (methadone and cocaine), and may be sufficient to have caused death. There has been previous cannabis use, but no active cannabis present at the time of death'.*
- The question of drugs that cause cardiac arrhythmia is being addressed by the Cornwall DAAT with various partners to see if there is any scope to limit the combinations of drugs or work with those that continue to use these drugs. Methadone is an opiate substitute drug which is used by health professionals and also affects the heart arrhythmia. This work is on-going.

3.6 **Drug Related Death 3 – Mar 2017**

- 43 year old woman who died in the bath at her home in the Liskeard area. She had 10 years of opiate substitution treatment for heroin dependence but had disengaged latterly before her death. Treatment services were still maintaining contact with her with their last contact at the needle exchange service where she was issued with naloxone and encouraged to re-engage. She had a pattern over the 10 years of withdrawing from services following relapse and then re-engaging.
- Cause of death given as 1a. Multiple drug toxicity and the inquest returned a drug related death conclusion.
- Information from the scene of the death was confused as it appeared that this woman may have had up to 4 hours alone whilst taking a bath and that she entered the bath having taken heroin and diazepam at some point during the day. When she was checked she had already died and was submerged in the bath.
- A month before her death she informed drug treatment worker that she was using £40 worth of heroin per day intravenously and although happy to speak adhoc with worker did not want treatment at that time.
- The partner of the woman gave evidence although he was intoxicated when the death occurred. He has since taken his own life and had been in drug treatment 4 months prior to his partners death.

Findings and applying the learning

- MH issues.
- Regular harm reduction advice given via the needle exchange service when this woman relapsed from treatment.
- A disengagement contingency plan has now been implemented for all service users where there is clarity of discharge arrangements between treatment team and service user. This includes how to get hold of the service user if they disengage from treatment- for example, outreach work.
- The medication reconciliation at the point of entry into the service (so drug treatment teams know what medication a service user is on when they are admitted to the service, irrespective of whether the prescribing agency is Addaction, the GP, or a secondary care clinic. There is now far better communication between services on medication issues.

3.7 **Drug Related Death 4 – Apr 2017**

- 42 year old woman who was found deceased at her home address in the St Austell area. She was not in drug or alcohol treatment but had a history of drug use including 'dabbling' with methadone according to her partner.
- The cause of death was given as 1a. Ill effects of multiple drugs and the inquest concluded that this was a drug related death.
- Illicit use of methadone and cocaine established by toxicology- two drugs which also affect the hearts natural rhythm. Crack cocaine use on the day of death so the cocaine metabolites probably account for this.

- Turbulent on/off marriage with heavy drinking and drug use being prevalent.
- Pain management using intravenous heroin for arthritis and back pain.

Findings and applying the learning

- MH issues.
- Another example of taking drugs with another and there not being in place some contingency for when things go wrong.
- Another example of a death involving physical and mental ill health.

3.8 **Drug Related Death 5 – Apr 2017**

- 42 year old man found deceased in a decomposing state at his home address in the Bodmin area.
- In long term drug treatment with Addaction and CDAT precious to that- 17 years in total.
- Cause of death given as 1a. Multiple drug toxicity and the inquest concluded that this was a drug related death.
- This man was steadily reducing his Methadone prescription from 80ml/ day in 2011 to 13ml/ day in 2017.
- Increasing anxiety, reported harassment where he lived and the impact of a broken ankle in early 2017 affecting mobility led to weekly collections being implemented as he was on a much lower dose of methadone.
- Throughout treatment he reported using amphetamines, heroin, and street sourced benzodiazepines, new psychoactive substances and diverted prescription medication on an occasional basis on top of his Methadone. This increased with frequency towards the end of 2015, but subsided again until early 2017 when it began to increase again.
- Alcohol consumption remained consistently high.
- Throughout his treatment it was difficult to maintain a sufficiently high level of engagement to facilitate better risk management and recovery planning. This man remained largely unresponsive to offers of therapy, group work, volunteering, life skills, detox programmes and support from other agencies, often citing his dog as the reason he was unable to attend or simply stating he was not ready yet. He was motivated to reduce his methadone prescription, but showed little enthusiasm about modifying his other drug taking behaviours, in particular his alcohol consumption.

Findings and applying the learning

- Another case where the drug treatment team identified that there was a need for better contact contingency planning as part of the triage process to ensure the recording of an agreement with service users on the best way to re-establish contact should they disengage for any reason. This now includes alternative contact arrangements for the keyworker in the event they are unable to reach the service user.
- Where service users are socially isolated through anxiety or physical impediment, timely risk management and care planning to include consideration of the use of community outreach services and home visits where appropriate to better safeguard the service user's well being
- A list of best practise recommendations were appended to the drug treatment report in this case all of which are now incorporated into standard working with service users but includes full contemporaneous notes to be made on the record of any issue/ event, increasing professional curiosity, safe prescribing and all deliberations to be recorded contemporaneously, caseload management and reducing the need for service users to be re-assigned keyworkers.

3.9 **Drug Related Death 6 – Apr 2017**

- 21 year old man died in hospital after a drug poisoning at the address of another in the Bude area. After a night out at a local nightclub this man attended an address to buy drugs. At 4.13am he was seen going upstairs and then return downstairs at 4.20am, now in an "apparent playful state". Within 20 minutes this had become an "agitated, erratic state" and the ambulance was called. Paramedics described him as "agitated", with a high temperature and fast heartbeat. Evidence was heard that 3 tablets of MDMA were consumed by this man.
- Cause of death given as 1a. MDMA toxicity with an inquest conclusion of misadventure.
- Not in drug or alcohol treatment.

- HM Coroner adjourned inquest to hear why ambulance services did not get to the incident for 46 minutes. The inquest heard how the original 999 call was made at 04:53 and then followed by three further calls at 05:00, 05:09 and 05:28.
- An otherwise hard working man who did charity work in his local town, a friend stated that he knew this man used MDMA, cocaine and ketamine sometimes.

Findings and applying the learning

- Although cases of MDMA toxicity are rare as compared to its use nationally, this case serves to flag up the potential danger of this illicit drug use where no safeguards are in place to ascertain it's chemical make-up or dose strength.
- An update as to the ambulance delay is awaited as at the writing of this report.

3.10 **Drug Related Death 7 – May 2017**

- 49 year old man who died at his home address in the Falmouth area who had been out of drug or alcohol treatment for two years.
- Cause of death given as 1a. Heroin and cocaine use with the inquest concluding that this was a drug related death.
- He had been under a lot of stress prior to his death with the death of a grandparent (2 months previous) and his mother having inoperable lung cancer- she was delivered back home from hospital by ambulance to find her son deceased. This man had a heart attack 12 months prior to his death and had a stent fitted. He was diagnosed with ischaemic heart disease. He was prescribed various medicines for his heart and mental ill-health and had been restarted on Quetapine (anti-psychotic medication) in March 2017 .
- Active treatment for depression.
- Sectioned in 2009 with a diagnosis of acute paranoia.

Findings and applying the learning

- MH issues and physical illness.
- Toxicology concluded that death could have been from illicit heroin or cocaine use, or a combination of both.
- Another case of a very unwell man with mental health issues consuming drugs.

3.11 **Drug Related Death 8 – May 2017**

- 45 year old woman, lived alone and who died at her home in the Truro area.
- Cause of death given as 1a. Unascertained. The inquest recorded that this death was due to natural causes.
- Deceased found by a police officer slumped face down in front of the lounge window. She had a past medical history of depression, anxiety, long standing alcohol issues, and breast cancer. She had a mastectomy around 18 months ago and was still in pain. She had recently suffered from blackouts and fits.
- Apart from medicines being present there were metabolites of illicit methadone and cocaine present with the toxicologist concluding that in the case of no anatomical cause of death then mixed drug toxicity may have acted as the primary cause of death.
- This case was discussed at the Cornwall Drug Related Death Review Panel and concluded that this was a drug related death as per the definition of a DRD as the methadone and cocaine was illicit.

Findings and applying the learning

- Propensity to misuse codeine based medicines that she obtained over the counter from pharmacies. This was the mainstay of her seeking out drugs and she was at odds with her drug treatment team as she was not deemed to be physically dependent on codeine. She was seeking an opiate substitute prescription but did not get this. This dynamic was handled whilst she was in treatment and engaged but when she failed to attend appointments during her final treatment episode she could not be monitored.
- Common theme that this woman would overrule advice and expert knowledge in favour of doing things her way. She gave up taking her cancer medication and disengaged from drug treatment when she couldn't get the medication that she thought she needed. One of her responses to being diagnosed with cancer was to escalate her consumption of alcohol.
- Good coordination of drug and alcohol services around her medical conditions.

3.12 **Drug Related Death 9 – Jun 2017**

- 30 year old man who lived alone and who died at his home address in the Liskeard area.
- Cause of death given as 1a. Drug Misuse and 2. Hepatic Steatosis with an inquest conclusion of a drug related death.
- Alcohol metabolites alone were 3 ½ times the legal drink/ drive limit and were near toxic in their own right. Heroin, amphetamine, and prescription drugs added to overall toxicity.
- Impaired and dysfunctional liver.
- In drug treatment with a disclosure made to Addaction 2 days before he died that he had allowed another to inject him with a 'speedball'- a combination of heroin and another stimulant drug usually cocaine or amphetamine.
- The last 2 days of his life he was in crisis care with Addaction due to this rapid escalation in his drug taking.
- Adverse childhood experiences (ACE's) included the death of his father when this man was 19, early use of drugs; cannabis aged 11, alcohol aged 14, ecstasy aged 16 and cocaine aged 16. Heroin disclosed aged 28.
- He had a good upbringing in his own words but the death of his father saw increased use of drugs and alcohol.
- Considered himself to be an ineffectual father to his twin sons. Partner breakdown led to less access and relationship with his sons but he was showing motivation to change due to these protective factors.
- A relatively long term in continuous treatment with evidence of MH engaging with various aspects of Addaction treatment and post detox aftercare.
- There were still plans for MH to continue receiving support in the last month of his life which included residential care.

Findings and applying the learning

- The rapid escalation in allowing others to inject gave the treatment service very little time to respond although they did engage in crisis management with a lot of work planned including a detox. Despite advice it appears that this situation may have reoccurred prior to death.
- The routine enquiry about adversity in childhood approach is a proven catalyst for increased frequency of disclosures, better therapeutic alliance and more targeted interventions. The case for routine enquiry about adversity in childhood is compelling in adults; it's acceptable, feasible and enhances potential for positive outcome. It has the potential to stop the intergenerational impact of ACEs and better target root cause by fixing problems once. There is now much work being done within Addaction to introduce this approach and to assess the impact of ACE's amongst their current and future service users.

3.13 **Drug Related Death 10 – Jul 2017**

- 61 year old man who was found deceased at his home address in the Truro area. Concerns for his welfare had been raised after he missed a number of doctor's appointments.
- Cause of death given as 1a. Empyema (infection of the lungs pleural cavity) and 2. Acute chronic illicit drug use with a narrative conclusion given at inquest that this was a combination of natural causes and illicit drug misuse to which self-neglect also contributed.
- A physically unwell man, malnourished with impaired liver function, history of lymphoma (cancer that begins in infection-fighting cells of the immune system, with empyema being the actual cause of the death. Hepatitis C and underlying COPD. Chronic malnourishment with this man's weight being a major concern to the GP.
- Recent chest infection in weeks prior to death, referred to hospital but failed to attend.
- 2 safeguarding referrals had been made by in June and July. *follow up asap*

Findings and applying the learning

- Another example of a very unwell person being involved in drug use (morphine and cocaine).

3.14 **Drug Related Death 11 – Aug 2017**

- 49 year old man who was witnessed to collapse in a public place in the Newquay area. There is some confusion as to why this man collapsed with reports that he had been consuming cannabis and wine prior to collapsing or following suspected heroin and cocaine use. He was hospitalised but never regained consciousness dying 9 days later. Furthermore, the initial hospital report to HM Coroners Officers mentions significant hypoxic brain injury which is not in the pathologists report so the awaited inquest will hear more evidence to elucidate this.
- Cause of death given as 1a. Bronchopneumonia and 2. Ischaemic heart disease and substance abuse. The inquest is awaited for a conclusion.
- Hospital admission bloods unavailable for analysis so drugs that may have been present when he collapsed were unable to be detected in post-mortem blood samples as they had been removed by the body during the hospitalisation period.
- History of rough sleeping, prison and a dislike of adhering to a structured appointment and treatment system.
- This man maintained throughout his treatment journey that he did not want to change his drug use but did want to achieve abstinence from alcohol.
- The risk of overdose was high given this man's tolerance level was low and his infrequent use of heroin. He only disclosed use of heroin by injection 3 weeks before his death.

Findings and applying the learning

- The unavailability of ante-mortem samples in cases where the deceased has been hospitalised for a period prior to death is being examined as this can lead to vital evidence being unavailable to ascertain some of the factors leading up to the death. This and other cases in 2017 as well as cases in 2018 are informing the debate as to whether it is feasible for hospitals to take samples and store in cases such as this. HM Coroner is being reported to in due course when these occasions arise.
- As an agency, Addaction have developed a more assertive outreach approach to engage people who struggle to work with the appointment system and this was demonstrated in this case where this man could easily have dropped out of treatment save for the outreach work being done to keep him engaged.

3.15 **Drug Related Death 12 – Aug 2017**

- 32 year old woman who had been out of drug treatment for 7 months. She had been drinking and had taken drugs prior to collapsing and being hospitalised. She died 9 days later never regaining consciousness.
- The cause of death was given as 1a. Hypoxic brain damage and 1b. Drug overdose. The inquest returned a drug related death conclusion.
- Hospital ante-mortem samples not available for toxicological analysis (as per case 11 above but an unrelated death)
- This woman had been a child with an abusive family upbringing where she witnessed domestic violence towards her mother and violence aimed at herself and siblings. She then became involved as an adult in abusive relationships with some very serious assaults against her.
- A drug related cardiac arrest to which she never regained consciousness and died 10 days after being hospitalised.
- Referred to drug treatment by social services. Reluctant service user who only engaged because of the child issues. Children ultimately removed from the family home due to risks of the drug use and associated issues. Once this had occurred this woman took a very quick downward slide into chaotic drug use.
- 3 days before her final admission to hospital she overdosed on intravenous heroin. She informed the ambulance crew of this stating that she normally smoked heroin. She had been given CPR by a friend, naloxone used by the friend, hospitalised and discharged.
- Final admission to hospital involved intravenous use of heroin and Gabapentin.

Findings and applying the learning

- MH issues in the form of anxiety, panic and stress.
- It appears that this woman gave up any care for herself and deliberately took drugs whenever she could. She informed the drug treatment team that she did not want

treatment once her children had been removed. This was extremely difficult to manage with any certainty as her protective factors had been removed and her self- declared reckless use of controlled drugs.
- A very sad example of inter-generational trauma being passed on ending with complex issues and ultimately fatal drug use.

3.16 **Drug Related Death 13 – Aug 2017**

- 39 year old man who died in his bedroom at supported accommodation in the St Austell area. He was in drug treatment and died as a result of consuming a cocktail of drugs which included heroin, cocaine, prescribed methadone and alprazolam. Alprazolam in the form of the brand name Xanax had been brought into the supported accommodation illicitly and appears to have been shared with this man and others. There are no known third parties to this death.
- The cause of death was 1a. Cardio respiratory depression and 1b. cocominant use of several drugs with cardiorespiratory effects. The inquest conclusion was that of a drug related death.
- Whilst this man was in supported accommodation he often had to be reminded of appointments and clinical reviews which were addressed by the 'in house' Addaction worker who had a good working relationship with him.
- Local motivated GP was keeping this man engaged in respect of his mental health issues.
- The drug screens had been clear of illicit substances in the months leading up to his death although he did reveal sporadic heroin use. This can be particularly dangerous when a persons' tolerance to opiates is lower.
- There was tangible evidence of recovering from drug dependence with an associated wish to improve his domestic circumstances.

Findings and applying the learning

- Mental health and physical illness combined with drug use.
- This man had a lot of people who were looking out for his welfare and treatment. These included a very proactive Addaction worker, equally proactive and on-hand staff at his supported accommodation and a motivated GP keen on addressing his mental health issues. This type of controllable treatment environment can work very well with a motivated or non- motivated individual as daily welfare checks, appointment reminders and the like are so easily taken care of- ON definitely benefitted from this.
- Another case where Alprazolam has been significant in the death although we will never know its true significance as this man had combined it dangerously with other central nervous system depressants.
- For information and as an example of the current hype surrounding Xanax I have attached the below link from a court case in Exeter from September 2017. https://www.devonlive.com/news/devon-news/xanax-new-flavour-month-drug-428537
- The information regarding the Alprazolam was all passed to the Police.

3.17 **Drug Related Death 14 – Sept 2017**

- 44 year old man who died at his home address in the Looe area.
- Cause of death given as 1a. Multi drug toxicity and 2. Cardiomegaly (enlarged heart). The inquest came to a conclusion of a drug related death.
- The GP disclosed that this man had a history of anxiety and depression with a long history of alcohol use. He was hearing voices, suffered paranoia and occasionally smoked heroin.
- The only one of this year's cases to be in alcohol treatment only disclosing that he had been alcohol dependent for 15 years.
- No disclosure made to Addaction that he had used drugs and he did not present with drug issues.
- Illicit methadone obtained by unknown means and from unknown person.
- This man's friends were others who had drug and alcohol issues. He led a reclusive lifestyle and only occasionally ventured out to see friends.
- He died a month before his first planned alcohol detox.

Findings and applying the learning

- This death was unexpected and went against the grain of this man's general trend in treatment.
- Good parental care from father who had cared for his son having alcohol and mental health problems for many years.
- Addaction had been able to coax him out of his safe home environment to engage with his in the community and his self-esteem and personal care was improving.
- The planned detox was a big step forward but sadly never achieved.
- With no tolerance to opiates the methadone was a significant factor in this death but appears to have been unseen by services and the father.

3.18 **Drug Related Death 15 – Sept 2017**

- 19 year old man who died in hospital after taking ketamine and MDMA (Ecstasy) tablets at a holiday premises owned by one of his friends. He was on holiday from out of Cornwall with friends celebrating getting his A level results and obtaining a place at university. He was not in drug or alcohol treatment.
- Cause of death given as MDMA and ketamine intoxication with the toxicology showing significant amounts of MDMA present with lesser amounts of ketamine and cannabis. The inquest is awaited but is likely to conclude that this a drug related death.
- Witnesses give evidence of an MDMA overdose. Some of the party took drugs voluntarily and there was care in place of a sort as some of the party became aware of this man's condition, tending to him and calling the ambulance. He went into cardiac arrest in the ambulance.
- This man suffered from Horners Syndrome- this is a combination of signs and symptoms caused by the disruption of a nerve pathway from the brain to the face and eye on one side of the body. Typically, Horner syndrome results in a decreased pupil size, a drooping eyelid and decreased sweating on the affected side of your face. The sweating aspect particularly of this syndrome would be impacted by the MDMA.

Findings and applying the learning

- A sad but poignant reminder that no illicit drugs are safe. There are drug combinations here too and the added dimension of a medical condition that would exacerbate MDMA overdose.

3.19 **Drug Related Death 16- Sept 2017**

- 47 year old man his home address in the Bodmin area. A drink and drugs party was held at this man's home and he was found in the bathroom, slumped to his knees with a needle still in his hand. He was cold and blue so had been alone for a while. He and another had left the party in the early hours to purchase heroin. The other man smoked heroin and passed out on the kitchen floor whilst subject injected in the bathroom.
- Cause of death given as 1a. Poly pharmacy toxicity with alcohol misuse. An inquest delivered a conclusion that this was a drug related death.
- The alcohol level in itself was toxic and potentially fatal depending on tolerance. He also consumed heroin, prescribed methadone, diazepam, cocaine and mephedrone. Whilst the alcohol and heroin could have been independently fatal, other drugs combined to enhance the effects of the overdose.
- In drug treatment with a drug and alcohol history in treatment of 7 years. He had a medical review 4 weeks before his death where he claimed that he had been opiate free (excluding methadone) for 6 weeks. If this is true then there may also have been tolerance issues at play.
- This man had naloxone issued to him as did 3 others who were at the party. Whilst it is not known how many had naloxone there and then, there was a certain amount of knowledge between them regarding heroin overdose. Intoxication of others appears to have been the deciding factor in why this man did not receive early first aid. The person who found this man had naloxone issued also.
- Previous detox was successful with this man becoming abstinent from alcohol for 2 years.
- Adverse childhood experience is relevant in this case with childhood abuse. He was referred for mental health assessment but he did not attend stating that he 'favoured a forward looking approach to recovery and did not want counselling or anything that involved raking up the past' as he saw it.

- Mood and presentation always improved when this man was able to reduce his consumption of drugs and alcohol.

Findings and applying the learning

- This man clearly had unresolved childhood trauma but he chose not to address it with the assistance of others although given ample opportunity to do so.
- He wanted to become drug and alcohol free especially for his 3 children and 3 step-children so protective factors were available.
- This case illustrates the inter-generational aspect of drug and alcohol use with a now passed on risk to this man's children.
- Plenty of naloxone trained help at the scene but negated by intoxication.

3.20 **Drug Related Death 17- Sept 2017**

- 29 year old man who died at his girlfriend's address in the Truro area.
- This case is awaiting an inquest but toxicology indicates the presence of heroin, cocaine and medicines such as diazepam, pregabalin and amitriptyline.
- He had informed his girlfriend that he was to inject cocaine and the toxicologist states that '*post-mortem blood was at concentrations consistent with recent cocaine abuse. He is therefore likely to have been experiencing the effects of cocaine at the time of his death'*.
- Family stability, work prospects, a stable home, medication and drug team/ mental health team support were all in place.
- Good support from family.
- Willingness to work with Addaction.
- Negative influence of friends and associates in relation to his drug/ alcohol use.
- Protective factors were present and he was working towards a future which involved paid work, being able to drive and supporting himself in his own premises.
- Dangerous combination of drugs such as heroin and cocaine the latter sometimes in the form of 'crack' cocaine.
- Drugs led to poor mental health. He was aware of this link but could not give up drugs completely.
- An apparent self- administered drug overdose that appears to have occurred without any support around him or awareness by others.
- Another example of a case where certain drugs in combination have possible led to a heart arrhythmia. This is undetectable at post- mortem.

Findings and applying the learning

- There is concern here that others may know of specific detail of this death but have not come forward. One of the witnesses has since taken their own life. In the light of this man's progress in treatment it is feared that the exact detail of his death may never be known.

3.21 **Drug Related Death 18- Oct 2017**

- 27 year old man who overdosed on a cocktail of drugs including heroin, cocaine, prescribed methadone and various medicines in a gents toilet cubicle in a supermarket in the Camborne area. He was of no fixed abode.
- This case awaits inquest but the toxicology strongly points towards a poly drug overdose with the death occurring a short while after the administration of heroin.
- Very early age use of alcohol (13) and heroin (16).
- 9 treatment episodes within a 3 year treatment history with Addaction all of which were managed by the criminal justice team with sporadic arrests and prison.
- Mr Carroll reported significant mental health concerns including experiencing hallucinations, cognitive confusion, paranoia and insomnia. Community Mental Health Team assessments were that these symptoms had arisen from his use of substances and were not symptomatic of a mental health disorder.
- Entrenched early onset pattern of poly-substance misuse and acts of domestic violence towards a partner in front of his children in conjunction with a deliberate act of self injury in front of his family.

- Multi agency working with Offender Management, Health Care for the Homeless, housing professionals and the Community Mental Health Team is documented throughout all treatment episodes and contact with family was initiated when Mr Carroll did not attend appointments to gather information on his welfare and monitor risk.

Findings and applying the learning

- This case presented a constellation of difficulties related to substance use, homelessness, prolific offending and emotional instability. In response to his high-risk lifestyle an intensive case management model of practice was utilised, but he found it difficult to interact with the treatment and support on offer.

3.22 **Drug Related Death 19- Oct 2017**

- 50 year old male found deceased at his temporary home address in the St Austell area having been found up to 3 days after he died.
- Cause of death given as 1a. Multiple drug poisoning with an inquest conclusion that this was a drug related death. Toxicology stated that *'there had been use of both amphetamine and heroin. These in combination with therapeutic drugs may have proved fatal'*.
- This man suffered from anxiety, chronic obstructive pulmonary disease and also had a history of substance abuse. His mental ill health was an issue which included being diagnosed with borderline personality disorder. He had liver problems and required prescribed analgesia in the form of pregabalin, cocodamol and amitriptyline.
- Some of his prescribed medication was in itself subject to abuse with or without illicit drugs on top.
- He was an intravenous user of New Psychoactive Substances (NPS) and amphetamine with a history of illicit opiate use so the heroin in toxicology was a surprise showing a sudden relapse into opiate use again.
- Mother of this man very critical of mental health treatment or lack of it. She quoted the GP as saying, in relation to her son's suicidal ideation and the fact that he didn't want to jump in front of a train because it would affect the train driver and his family, that he was not suicidal.
- MH assessments not carried out due to this man's non-attendance so he was discharged from CMHT care. He was always pointed back towards drug services.
- Various ways of dealing with dual diagnosis issues discussed at inquest including CMHT outreach, escort to assessments and co- located working.

Findings and applying the learning

- Addaction recognised that this man would have been better being transferred to his home town's drug service but he maintained that he wanted to keep treatment in the town that he intended living and where he had family close by. Whilst this man received a good level of support it was recognised that this could have been better in his 'for the time being' home town.
- Recognition that this man did not get the mental health treatment he should have had and this was an example of another dual diagnosis case where services had let him down.
- HM Coroner issues a Regulation 28 notice in this case as he was concerned that if nothing was changed there may well be future deaths due to the issues at play and disclosed at inquest. At the writing of this report the result of that Reg 28 notice is awaited.

Drug Related Death 20- Oct 2017

- 52 year old man who died in his bed at the premises which he shared in the Liskeard area.
- Cause of death given as 1a. Toxic effects of morphine and methadone and 2. Lung abscess, bacterial endocarditis and emphysema. The inquest concluded that this was a drug related death.
- A very unwell man who had medical issues such as severe COPD, bacterial endocarditis which developed into left ventricular failure, lung abscesses and acute renal failure in 2014. Infection in groin area due to injecting.

- He had been in drug treatment for 3 years and he daily received methadone but was known to use opiates on top of his prescription.
- He is referred to as homeless by Addaction and his GP but a witness says that he co-habited at the address where he died for 8 months. This man stated that he had been living in a tent in his last 3 months of life and was known to sleep in shop doorways. This did not help his serious medical conditions.
- Between September 2015 and August 2016, he engaged well, remained stable on his opiate substitute prescription and was not using illicit substances.
- In August 2016, he disclosed a return to using heroin and tested positive for opiates and benzodiazepines. He reported using £10 heroin twice a week, predominately through smoking and occasional intravenous use, and this appeared to be a consistent pattern in his reported use until his time of death.
- Lots of evidence that this man was not heeding advice as to his health and homeless situation. He was noted to be getting weaker, thinner and grey skin.

Findings and applying the learning

- It is recognised that more assertive outreach could have been done to track down this man when he did not attend appointments or some other facet of his treatment was ignored. Whilst this is true, in the ideal world the number of complex cases coming into treatment is increasing with a significant number possibly requiring assertive outreach at any one time. Addaction resources only go so far. This forms part of a bigger picture with agencies needing to work together more. This is currently being addressed with help from HM Coroner and the issues coming out of this and other inquests.

3.24 **Drug Related Death 21- Nov 2017**

- 62 year old man who died at his home address in the area. There were needles in every room of the address. This man had a history of opiate and alcohol use and suffered from metastatic prostate carcinoma.
- The cause of death was given as 1a. Toxicity of multiple drugs and 2. Metastatic prostate cancer. The inquest concluded that this was a drug related death.
- This man had a propensity for using amphetamine and had stated his intention to not give up the drug. This is also stated in the Addaction formal letter to the inquest which basically says that he was not engaging with Addaction over his two treatment referrals with them.

Findings and applying the learning

- There being no drug treatment to speak of other than this man declaring to Addaction that he was not going to give up amphetamine, no learning is obvious from this case. It is probable that this man's medical condition had prompted his resolve to carry on with his drug taking. His cancer had spread to his lower back and spine so he was in pain to which he received powerful analgesics such as fentanyl. His latter prescribing was for palliative care. The reckless and dangerous use of illicit drugs on top of his medication proved too much for his body to cope with.

3.25 **Drug Related Death 22- Nov 2017**

- 43 year old woman who died at her home address in the Padstow area after being alone for 4½ hours. One of her sons found her collapsed and administered first aid with another which included naloxone.
- The cause of death was given as 1a. Methadone overdose (In the context of drug use and a drug related history). The inquest came to a conclusion of a drug related death.
- History of depression and anxiety as well as a long standing opiate dependency with her being in drug treatment for 14 years. Diagnosis of COPD.
- The toxicologist concluded; '*There is a high therapeutic concentration of methadone. In a non-tolerant individual such concentrations may be fatal. There has been previous illicit heroin use but the concentration was low at the time of death'*.
- This woman received 60ml of methadone daily supervised at a pharmacy which probably accounts for all the metabolites present in toxicology. If they are slightly on the high side then this is likely to be due to her weak physical condition. She was malnourished and very underweight at death. The heroin metabolites were so low that they did not have a numerical reading.

- Discussion at inquest led to the theory that this woman died of her own lawfully prescribed methadone in combination with heroin and that her physical condition could have been a factor in her being unable to cope anymore with the strains of long term opiate use.

Findings and applying the learning

- This is probably a case where the body has had enough of an opiate dependence and is worn out. Her physical stature latterly was one of a woman going downhill. There is the presence of COPD yet again in a case of drug related death which would have not helped her recovery from opiate use.

3.26 **Drug Related Death 23- Dec 2017**

- 39 year old man found deceased at his home address in the Torpoint area with a can of butane lighter fluid in his hand. He had a past medical history of heroin and methadone use.
- The inquest is awaited but the toxicology shows a wide variety of substances present including heroin, cocaine, methadone, diazepam, pregabalin, mirtazapine and zopiclone. There is definite synergistic interaction between drugs in this case enhancing overall toxicity.
- The toxicologist also highlights the presence of an unknown inhaled volatile substance which could have also caused dizziness, disorientation, decrease in cardiac output, loss of consciousness and ventricular fibrillation on top of the effects of the aforementioned drugs. The level of this substance is not quantified but the evidence from the scene of the death shows that there could have been a high level of use due to the number of canisters located plus this man was also found with a canister in his hand.
- Diagnosis of deep vein thrombosis which was being treated.
- This man was in Addaction treatment and was in receipt of a methadone prescription. He had previously and successfully detoxified himself of drugs with the help of his parents abroad. He intended to do the same in January 2018 had he lived so he had motivation. Whilst there was shock at his death there were plenty of examples in his case notes of him having to be warned about the dangers of drug overdose and combinations of drugs. There is little mention of him using inhaled solvents/ gases psychoactively apart from a suspicion in July 2014 that he had used them.
- His default presentation was of low mood. He did have motivation however but the keyworker describes his motivation as cyclic with progress followed by regress in a fairly regular pattern.
- This man had not picked up his methadone for 5 days in which time the pharmacy should have contacted Addaction of this after the contracted 3 day period. This would have, in theory, given Addaction the chance to try and locate him 2 days earlier from when he was found deceased.

Findings and applying the learning

- This man dangerously combined a range of drugs with volatile substances such as aerosol gases. He had periods of motivation and would also relapse but had informed his treatment worker that he intended to detox like he had previously done.
- The '3 day rule' in pharmacy contracts has been raised at the DAAT Governance meeting and pharmacists were reminded of it and it's importance.

3.27 **Drug Related Death 24- Dec 2017**

- 30 year old homeless man who died in the street in the Falmouth area having died in a cross legged position. He had a sleeping bag with him so it appears that he may have died quickly after taking drugs and unable to get to his sleeping position.
- The inquest is awaited but toxicology has identified that poly drug use is evident with drugs such as heroin, MDMA, ketamine, alprazolam, buprenorphine and gabapentin. It is likely that a conclusion of a drug related death will follow.
- This man was due to have his first appointment with Addaction later the same day that he was found deceased. This was his most recent treatment period having had 3 previous episodes- 2 in 2014 that only lasted up to 4 months interspersed with prison and one other in 2017 which lasted 3 weeks as he moved on to Bristol.

- It will obviously never be known what would have come of that contact with Addaction later the same day but what is known is that he self- referred to Addaction which is a positive first step. The obvious inference here is that he recognised that he needed support with drugs and/ or alcohol.

Findings and applying the learning

- Addaction worked quickly to get this man his first appointment- one week after his self-referral. The fact that he died hours before his first appointment is tragically unfortunate.
- The Addaction notes say that when he had last self- referred he had disclosed that an ex-girlfriend had died within the last month by suicide. He was spoken to about this and also about his ideation in respect of that. He was not found to be suicidal and stated his mental well-being was ok. It is not known the true extent of this news on his frame of mind.

3.28 **Drug Related Death 25- Dec 2017**

- 47 year old man who died at hotel accommodation in the Liskeard area being evicted from his home address 5 days previously. Drug paraphernalia suggested a fatal heroin overdose.
- Inquest awaited but toxicology identifies that there was a significant amount of alcohol present near toxic in its own right. The heroin present was at a level and in a ratio of free to total morphine that death would have been soon after administration.
- The toxic effects of both of these substances are well known as are the risks in combining them.
- A witness who was staying with this man gives an account of both men being intoxicated but it is unclear exactly who did what apart from heroin and alcohol were available and used. A tourniquet and needle were found close to this man on the bed that he had been using.
- He had been out of drug treatment for a month having been in treatment for the previous 21 months. Although this was a continuous treatment episode it contained many missed appointments which ultimately led to the therapeutic discharge of him from Addaction treatment. This discharge was made in consultation with his GP and a plan for re-engagement by him was made for the future.
- This man was able to cease his use of heroin and his opiate substitute medicine (methadone) on occasion but his consumption of alcohol was constant and, in fact, increased when he was drug free.
- There are many entries throughout the clients contact history that mention the effect of alcohol. These effects included a failure to attend appointments, attending whist inebriated, falling asleep in appointments and many other negative effects. Ultimately this led to the recovery coordinators being unable to do their job effectively. Alcohol was the main issue here with this man able to abstain from opiates.

Findings and applying the learning

- An eviction from ones home at Christmas with associated drug and alcohol issues had put this man at even higher risk of overdose.
- A dependence upon alcohol continually undermined this treatment journey leading to his therapeutic discharge. A plan had been put in place with his GP so that he could re-engage with drug treatment easier if he wished to do.
- There is still evidence to be seen and heard which will become apparent at the inquest such as the circumstances of his eviction. Addaction were not aware of this due to the cessation of his treatment but he was missing many appointments so they may not have been aware even if he had not been discharged.

3.29 **Drug Related Death 26- Dec 2017**

- 51 year old man who died at his home address in the Penzance area.
- Inquest awaited but the cause of death has already been ascertained as 1a. Drug misuse. Toxicology concluded; *'Methadone was at a level within its quoted potentially toxic to lethal ranges, which overlap due to the development of tolerance was detected. Therapeutic levels of diazepam, alprazolam, pregabalin and trazodone were also present.*

CNS depressant drugs including may act synergistically to enhance their toxic effects on the cardiorespiratory system. There is also evidence of cannabis use'.

- Being in long term (16 years) drug treatment he had been prescribed methadone for an opiate dependence.
- The main pathological findings were pulmonary oedema, cardiomegaly and left ventricular hypertrophy which can be conditions that manifest as a result of long term drug use.
- The medication found at the scene of the death indicates that he was being treated for angina and enlarged prostate and the Addaction report points towards him also struggling with heart and lung issues.
- Addaction are quoted as saying*;* 'It was felt that there was real optimism regarding his future plans and so it came as a shock to hear that he had sadly died'.
- It is apparent that he was focussed on reducing his methadone prescription in order to re-attend detox and take another step closer to recovery. He had previously discharged early from a detox but this was deemed successful.

Findings and applying the learning

- Another case where Alprazolam has played a part in the mechanism of death. This man was not receiving this drug therapeutically.
- Another case where drug use laid side by side serious medical conditions.
- It is acknowledged that keeping a person in treatment is one of the safest ways to keep them from harm but it is not a guarantee. This man had built a long term working and trust relationship with Addaction but he chose to step outside of the advice on occasions ultimately, it appears, paying the price for that decision.

5. PROACTIVE MEASURES /INITIATIVES / PROGRESS 2017

5.1 **Cornwall DAAT Drug Related Deaths Review Group**

This panel of local experts in their field has continued to provide great advice and support for the investigation and prevention of drug related deaths. Cases are reviewed by a panel from a range of agencies with reports also being available from prescribing, toxicology and pathology. The added dimension of the group's access to experts from Pain and Psychiatric medicine at Royal Cornwall Hospital Treliske, Shared Care General Practice, Specialist drug and alcohol prescribing, the Head of Prescribing and Medicines Optimisation at NHS Kernow and mental health services from the Cornwall Partnership NHS Foundation Trust enables the Review Group to deeply consider the specifics and nuances of all cases.

5.2 **Reducing Drug Related Deaths Conference**

The South West Peninsula Drug-related Death Review Group in partnership with Public Health England held its 8th conference on Friday 14th July 2017 at the China Fleet Club, Saltash. It built upon the previous 7 conferences and used the opportunity to explore how good communication and cooperation between agencies, and individuals could help reduce the number of drug related deaths across the peninsula. The conference is still free to those attending, and is open to service users, carers, service managers, drug and alcohol workers, commissioners, Police, Coroners and their officers, with a keenness to encourage a good mix of workers from all disciplines. The agenda for this event appears below. Attendees were also offered 2 workshop sessions giving participants the opportunity to discuss and consider solutions to the challenges that arise in relation to reducing harm and promoting recovery both for those who use substance misuse services and the services that work to support them. The workshop details also appear below;

South West Peninsula Reducing Drug-related Death Conference 2017

Friday 14th July 2017

China Fleet Country Club, Saltash, Cornwall, PL12 6LJ

~ A G E N D A ~

9.00am	**Arrival, Registration and Coffee**	
9.30am	**Welcome and Introduction**	***Richard Chidwick, Public Health England And Kim Hager, MBE, CIOS DAAT***
9.40am	**Routine Enquiry About Adversity in Childhood**	***Dr Warren Larkin, Clinical Lead – DH – ACE Programme***
10.10am	**Opioid prescribing – turning off the tap**	***Dr Keith Mitchell, Cornwall***
10.40am	**Break for refreshments**	
11.00am	**The National Working Group on Drug-related Death**	***Paul Hayes, Collective Voice***
11.40am	**It's time for drug laws that protect our families**	***Jane Slater, Anyone's Child***
12.10pm	**Workshops – first session**	
1.00pm	**Lunch**	
1.30pm	**Hepatitis C – towards eradication**	***Amanda Clements, Hepatology Advanced Nurse Practitioner, Plymouth Hospitals NHS Trust***
1.45pm	**Workshops – second session**	
2.30pm	**Short comfort break**	
2.40pm	**Feedback from workshops**	
2.50pm	**Final Q&A session**	
3.20pm	**Chair's Summing Up**	
3.30pm	**Close**	

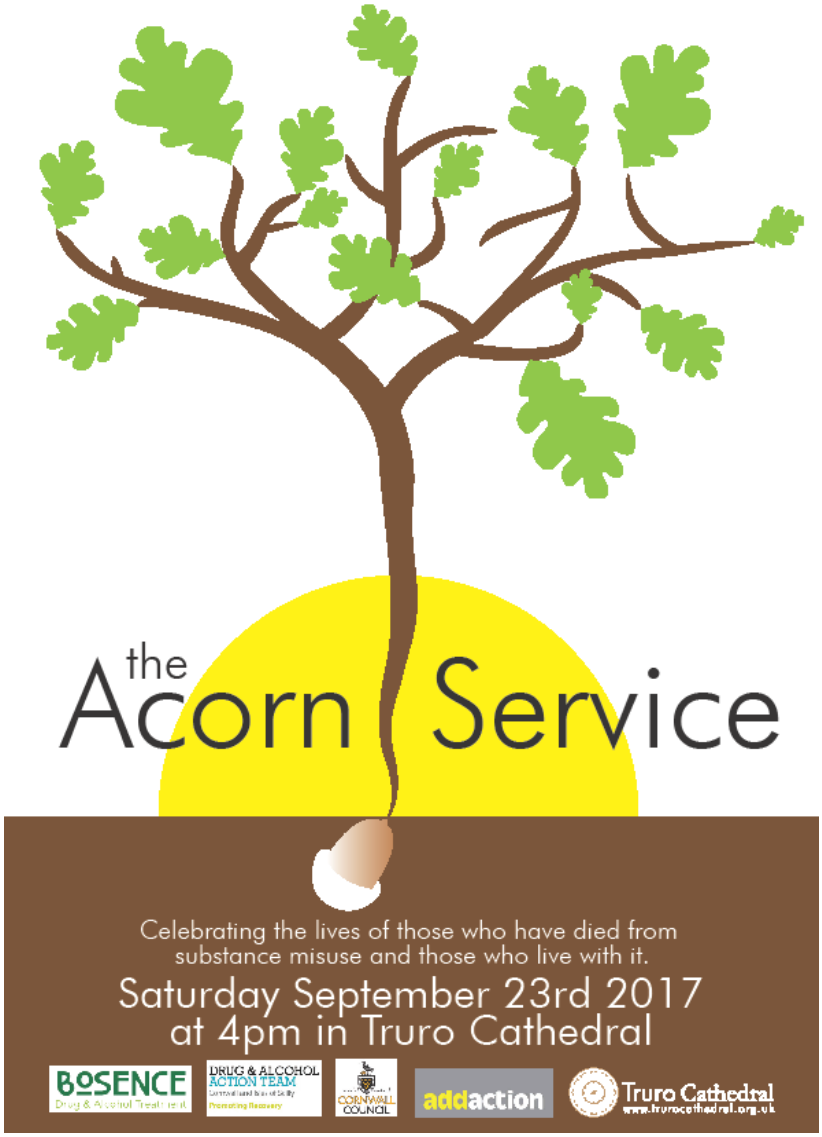
Workshop 1. Frequent Attenders at Treliske: Partnership working- A multi-agency response in Cornwall to reduce the social and fiscal costs associated with multiple needs and the resulting impact on acute care and community safety.

Workshop 2. Recognising and responding to service users who are at high risk of sudden death - a local Plymouth project- This workshop reviewed the findings and next steps of the recent project presented to the Point of Care Foundation on the patient improvement programme "supporting people bereaved by substance misuse".

Workshop 3. Street Outreach : A Positive Approach- A multi-agency assertive outreach approach to reduce street drinking, drug litter and engaging some of the most vulnerable adults across the county in packages of care which meet their needs.

Workshop 4. Creative Solutions- How collaboration and cooperation reduces risk and enables bespoke solutions for people with complex lives.

5.3 **Acorn Service of Remembrance**



Saturday 23rd September 2017 saw the fourth consecutive service with this year being the third to be held at Truro Cathedral. The service seeks to celebrate the lives of those who have died from substance misuse and those who live with it.
2016 saw record numbers of people dying from a drug related death in Cornwall with many more being alcohol and prescription related. The stigma often attached to drug-related deaths can leave those mourning feeling different from other mourners, with the special Acorn service providing a way to bring people together.
The service is organised in partnership between Cornwall Council, DAAT, Boscence Farm Community Ltd, Addaction and Truro Cathedral.

The service included personal reflections, music and readings from service users and drug treatment workers, a tailored service of remembrance and a tree of remembrance where messages were written on paper shaped oak leaves. We now have 4 years' worth of oak leaves that have been personalised. The cruel irony here is that at this time of year the oak loses its' leaves- the tree in our service always gains leaves.

The tree of remembrance in 2015- it now bears many more leaves representing lives lost

This years' service was well attended and the emotion of the occasion was very much in evidence with one mother saying 'I haven't been able to cry like this since my 20 year old daughter died earlier this year'.
This brave mother came to the service after hearing another mother speaking on Radio Cornwall the previous day when Laurence Reed held his live talk show. Laurence has been very supportive of this service over the last 4 years and Sid Willett from Cornwall DAAT was able to go into the studio with Kirsty to speak about the loss of her daughter Victoria aged just 21 when she died in 2016.

Victoria died aged just 21

Victoria is just one example of a life tragically cut short when she naively combined internet sourced drugs with GP prescribed medicines. Both of these mothers want to help others and raise awareness of the complexities of drug related deaths.

Gary Hales used heroin for six years and is now celebrating his 5th-year of not using Heroin. In that 5 years he's completed a diploma and a degree as well as working with Addaction as a volunteer and now a full employee. Gary gave a reading during the service.
He said "I've made some bad decisions in my life however, I am very fortunate to be in a position where I can share my experiences. My curiosity and naivety to drugs is what started my addiction - two deadly behaviours when combined and there are drugs around.

“I lost six years of my life to a heroin addiction. I am the lucky one as others I’ve witnessed lost their lives. I spent years chasing the dragon when I could have been chasing my dreams and aspirations. Eventually, I became a lost soul and on many occasions wished I would never wake up however, chasing death, led me to life.

Sid Willett, Drug Related Death Prevention Co-ordinator, Cornwall Drug and Alcohol Action Team (DAAT) said “I am proud to work in Cornwall with so many people that care about these issues and our communication between Police, drug treatment, pharmacy, HM Coroner and her staff, RCHT, SWAST and many others is second to none. The DAAT now being part of Community Safety within Cornwall Council allows us an even wider platform to prevent future deaths.
“This is a different approach to what is usually expected, as we seek to remember and to raise awareness at the same time. Our work is all about partnership working often with marginalised groups. Although sadly too late for some, the Acorn service seeks to remember, reflect and use the legacy of those who have died to change processes or whatever needs to be done to prevent future deaths.”

5.4 **International Overdose Awareness Day 2017**

International Overdose Awareness Day

International Overdose Awareness Day (IOAD) is a global event held on August 31st each year and aims to **raise awareness** of overdose and reduce the stigma of a drug-related death. It also acknowledges the grief felt by families and friends **remembering** those who have met with death or permanent injury as a result of drug overdose. Overdose Day spreads the message that the tragedy of overdose death is preventable.

Taking its key themes as prevention and remembrance, its goals are:

- To provide an opportunity for people to publicly mourn for loved ones, some for the first time, without feeling guilt or shame.
- To include the greatest number of people in Overdose Awareness Day events, and encourage non-denominational involvement.
- To give community members information about the issue of fatal and non- fatal overdose.
- To send a strong message to current and former drug users that they are valued.
- To stimulate discussion about overdose prevention and drug policy.
- To provide basic information on the range of support services that exists in the local community.
- To prevent and reduce drug-related harm by supporting evidence-based policy and practice.
- To remind all of the risks of overdose.

On 31st August 2017 the Cornwall Drug and Alcohol Action Team and Addaction (drug and alcohol treatment service) held an event on Lemon Quay, Truro to take these key themes to the public. The event ran from 9:00am to 4:30pm and consisted of staff from Addaction and DAAT engaging with as many people as possible. This included handing out information leaflets/posters, giving a range of advice and first aid training including ‘hands on’ resuscitation practice.

Some of the Addaction team helping to raise awareness

A first aider of the future getting 'hands on'

Related information was also posted and available at the various Addaction offices located around Cornwall.

With 32 people dying from a drug related death in Cornwall in 2016 and 26 in 2017 and many more dying from alcohol and prescription medicine abuse, this was an opportunity to talk about the many complexities surrounding drug and alcohol use.
A wide cross section of people engaged with the team including those who needed treatment, those seeking treatment for others, wider education issues and children wishing to learn first aid skills- the first aiders of the future!

5.5 **Closer working with mental health services**

The interface between drug and alcohol services and mental health services has been the source of much discussion over the years with a proportion of deaths occurring where the subject has died 'falling between services'.

Various gaps in treatment have been identified through scrutiny of the cases and the accurate reporting to HM Coroner. In the main these gaps have occurred in instances of dual diagnosis where the person in question has had drug/ alcohol issues in combination with mental ill health. Whilst mental ill health can occur as a result of the drug and alcohol use, there are also cases where mental ill health can lead to drug and alcohol use.

Some notable inquests in 2017 and 2018 have heard evidence of these gaps which has led to HM Coroner issuing 'prevention of future deaths' notices under Paragraph 7, Schedule 5 of The Coroners and Justice Act 2009 and Regulations 28 and 29 of The Coroners (Investigations) Regulations 2013. The Coroner will issue these notices if the inquest has revealed matters giving rise to concern. If the Coroner is of the opinion that there is a risk that future deaths will occur unless action is taken, a Reg 28 notice will be issued to those deemed best placed to address the issues and report within a 56 day period. At the writing of this report two such notices are being reported on for HM Coroner with dual diagnosis issues being at the heart of the concerns.

Ultimately these notices will change procedures, assessments and a range of other related issues to address the dual diagnosis gaps. The notices naturally bring services closer together to tackle the issues and it is the closer working between services that is needed going forward.

The DAAT's determination to address these and other issues has led to The Drug Related Death Prevention Coordinators role being expanded to include suicide investigation. This has been in place since March 2017 and has already been valuable in gaining more understanding of issues relating to dual diagnosis as well as related issues such as domestic homicide reviews. The DAAT's interaction with the Cornwall Suicide Prevention Group has been increased and this group is now close to dynamically reviewing suicide cases in a similar way to drug related deaths. The group's panel of experts consists of mental health professionals, Police, DAAT and Public Health. The cross referencing of cases in this group with the drug related death panel which involves mental health issues is very apparent.

6. OTHER DEATHS INCLUDING ALCOHOL

6.1 The DAAT does not routinely review alcohol deaths but there is overlap between drug and alcohol issues that cannot be ignored. In 2017 there were 26 cases of a drug related death where three cases (11.5%) involved significant levels of alcohol being present in the toxicology. Whilst the level of alcohol in each of these cases could have been independently fatal in some, they occurred in cases where the deceased had regularly consumed large amounts of alcohol and, therefore, had tolerance to alcohol. Each case involved the synergistic action of the alcohol with other drugs. 16 cases (61.5%) involved no alcohol at all with the remaining 7 cases (27%) involving alcohol at insignificant or light use level only- some of these cases involved post-mortem changes accounting for the alcohol presence. The table below in column 2 shows the total number of cases against certain criteria in column 1, column 3 is the figures pertaining to males and column 4 pertains to females.

Alcohol			
Alcohol present/ insignificant	7	6	1
Alcohol present/ significant (above 200 mg/ 100ml)	3	3	0
No alcohol present	16	12	4

Where service users are engaged in alcohol treatment or they attend a residential detoxification/ rehabilitation, they will be offered the opiate reversal drug Naloxone especially if they are known to have a history of opiates or are to be in vulnerable situations where opiates might be available. This has come about as a result of previous inquests and the learning thereof.

6.2 The deaths mentioned in this report are rigorously investigated and only become part of the report once the standard definition for a drug related death has been met. Along the way many other deaths are investigated where there is an initial suspicion that they may be drug related but later are updated by toxicology or pathology, for example, and natural causes might be apparent. Other cases will be of interest perhaps if they have included drugs which do not come under the standard definition but are of concern nevertheless.

This report has highlighted a rise in Gabapentinoid use which has previously been mentioned in other annual reports and coincides somewhat with the continued number of heroin deaths. The assistance of medical professionals is going to be important in tackling this abuse of these prescription only medicines and law changes are already afoot to try to interfere with unlawful use.

6.3 The involvement of DAAT in the investigation of suicides over the last 14 months has seen an escalation of this tragic situation amongst various groups including women who have taken their own life by more violent means. There are characteristics of these deaths that are deeply concerning and involve a range of issues including domestic violence, coercion, criminal gang involvement with vulnerable people being exploited, drugs, alcohol, homelessness, poverty, physical and mental ill health.

The vulnerability issues and crossover between suicides and the drug related death investigations are plain to see with the lines between the deaths becoming blurred as the complexity of the cases increase. DAAT's involvement with investigating cases that involve the vulnerable, however, does mean that what is learned in a suicide case can often be applied to a drug related case and vice versa.

7. CONCLUSION

7.1 This report highlights how the Cornwall DAAT strive to make the monitoring and investigation of the deaths as accurate as possible. This comes only with very good working relationships with HM Coroner and her staff, Devon and Cornwall Police, Addaction, Bosence Farm and a wide range of others. The DAAT is committed to forging ever stronger links with current partners in seeking out new possibilities. The learning and work coming from these cases in 2017 is in part responsible for an increasing awareness of dual diagnosis issues and the vitally important understanding of mental health issues across the board. The increased collaboration between drug and alcohol services and mental health services will be built upon in 2018 with cases being investigated adding to the worth in pursuing this course.

7.2 A reduction in drug related deaths to 26 in 2017 is welcomed from the record high seen in 2016 of 32 deaths- an overall reduction of 19%. This is still 26 deaths too many but there is much learning and work to be done in 2018 and beyond with the learning coming from these deaths.

7.3 This report identifies the work as priority for 2018 and beyond and sees an increasing complexity of case;

- A wide range of lawfully prescribed medicines have been identified in toxicology as having synergistic effects in combination with illicit drugs and/ or alcohol. DAAT have access to experts in their clinical fields to assist with analysing the issues to identify possible alternatives to medication and to reduce the risks involved to those who dangerously combine substances.
- In line with the first bullet point, there have been a high number of cases where the death has been attributable to drug use in combination with overt or underlying physical health issues. The central nervous system depressant effects of drugs such as heroin and diazepam (Valium) are especially worrying when they are combined with a person who has a medical condition such as chronic pulmonary obstructive disease, pneumonia or lung cancer.
- The instances of drug related deaths involving a drug which interferes with the natural rhythm of the heart is increasing and is of concern where other drugs are present which depress the central nervous system and respiration. This too can be further complicated by physical ill health.
- Instances of mental ill health are apparent none more so than the number of cases where there has been a lawful prescription for anti-depressant or anti-psychotic medication. Gaps between services have been identified and are being addressed in part with the valuable assistance of HM Coroner and her deputies hearing evidence at inquests and issuing notices to agencies which address issues such as dual diagnosis.
- Whilst not in the remit of this report, instances of suicide are of deep concern and have highlighted mental health issues still further. These cases illustrate the complexity of issues starkly and include drug/ alcohol, mental health,

domestic violence, poverty and a change in the way criminal gangs are exploiting vulnerable people.

- Adverse childhood experiences are informing the treatment agencies of a cohort who have deep rooted childhood trauma potentially underlying their manifesting physical and mental ill health as well as their use of various substances. Whilst the routine enquiry about adversity in childhood is relatively new, it is being employed by local drug services to more efficiently probe the underlying issues.

7.4 Complex cases will naturally involve a range of agencies being involved with the person experiencing the complexity. It is the aim of the DAAT to be a facilitator of best practice and to assist wherever possible more efficient working between agencies. Effective communication between agencies is paramount and cases investigated from 2017 have played their part in helping to make this so. The above listed points are in themselves major pieces of work which can only be effectively tackled with better inter-agency working.

7.5 Families and friends at inquest often ask why their loved one has died, what has led to this situation. Their sadness and loss must lead us all to work together to ensure that the names behind these cases are remembered and that they helped shape what is available for those who follow.

Produced By Sid Willett
Drug Related Death Prevention Coordinator
DAAT Cornwall & Isles of Scilly