

**TACKLING
DRUGS
CHANGING
LIVES**

**Reducing
Drug Related Deaths**

Profile of Drug Related Deaths Blackpool 2003 – 2005

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December 2006**



**WORKING TOGETHER
TO MAKE A DIFFERENCE**

Blackpool 
Primary Care Trust

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Summary & Recommendations

- 1. Age of Death** – The age of death is declining in terms of concentration of deaths in 2004 shifting down from the 35 – 44 year old category to the 25 – 34 year old category. The mean age at death is thus also declining.

Of concern is that many of this age group have had no contact with structured Drug Services. However, there is contact with the Criminal Justice System including Arrest Referral and Prison, and a small number of clients have had contact with Alcohol Services.

Further consideration should be given to how non-structured drugs services and non-drug agencies can be enable to identify these clients, possibly on the cusp between non-problematic and problematic use, to promote access to treatment.

The Injecting Risk Questionnaire should be revised prior to implementation to explore this issue.

Any action considered must also be attentive to the younger age at death among women than among men.

- 2. Methadone** – Continued vigilance is required given that methadone is implicated in deaths at twice the level compared to nationally.

Whilst there has been a reduction in deaths attributable to diverted methadone it appears that methadone is still contributing to death alongside other substances suggesting issues with compliance among those in treatment.

- 3. Prescription medication – Dual Diagnosis** – Whilst clients may have complex needs related to mental health issues, the role of prescription medication in drug related deaths is concerning.

Deaths include those who are prescribed benzodiazepines and antidepressants and those who self medicate with these substances and deaths among those on a prescription for these medications but where the prescribed medications do not appear in toxicology at the time of death. Where non-fatal overdoses have been examined to ascertain whether they were accidental or deliberate, deliberate overdoses were associated with topping up illicit drugs with medications.

Co-proxamol implicated in a number of deaths in 2003, was withdrawn from January 2005 due to its association with accidental and deliberate fatalities among users. There have been no deaths associated with coproxymol in 2005.

- 4. Alcohol** – despite the development of staff and users resources regarding the risks of concurrent alcohol and drug use this level of drug related deaths involving alcohol continues to rise and outstrips national levels by 2 ½ times. Whilst Blackpool has

considerable levels of poly drug use, the largest single group of deaths is among those who use one drug with alcohol.

Additional work regarding this key risk issue should be undertaken to identify key actions to address this issue.

5. Homelessness – Levels of homelessness among those dying from a drug related death has a significant impact on a number of findings. Blackpool generally has higher levels of street homeless experiencing drug related deaths than is nationally the case and slightly higher levels of death among those who fit the wider NFA category, i.e. lacking secure accommodation and not resident at a defined address.

6. Place of death – public places – Blackpool consistently has higher level of deaths in 'the street' and other places (not residential or hospital) than is nationally the case.

2005 showed this divergence most starkly with 20% or 1/5 of all deaths occurring in public places. This has continued into 2006 with almost a 1/3 of suspected Drug Related deaths to date occurring in public.

Deaths in public places in both 2005 and 2006 to date have all taken place in public toilets. Prior to this time there were no such deaths in Blackpool.

Current work to address this issue requires both continuation and strengthening. The Injecting Risk Questionnaire should provide a basis for focussing future interventions regarding public injecting.

7. Prison Releases – 2005 showed a marked increase in the numbers of deaths among those released from prison and a shortening of the time lapse between release and death – the range being within 24 hours to 19 days.

Further work is requires to address this issue as identified in the Harm Reduction Action Plan and in light of the introduction of the National Offender management Service.

1. Introduction

Drug Related Deaths are reported by Coroners District to St George's Hospital Medical School, which houses the European Centre for Addiction Studies. They compile the data nationally and report the rate of Drug Related Deaths annually.

What is a Drug Related Death?

The definition used by St George's hospital in collating the national figures, includes all deaths where psychoactive substances and controlled or illegal drugs are implicated.

Drug Related Deaths can span the spectrum from deliberate overdose using prescribed therapeutic medication, to accidental deaths caused by illegal drug use, and a range of complex circumstances within this spectrum.

These figures relate to immediate deaths only, and not Delayed Drug Related Deaths such as those that arise from virus related conditions such as HIV/AIDS, Hepatitis C or bacterial infection.

This definition locates these deaths in the category Immediate Drug Related Deaths (IDRDs). In terms of identifying the proportions of immediate to delayed drug related deaths, John Moores University who host the National Drug Treatment Monitoring System have examined deaths among those in contact with treatment service in the North West.

This study identified that approximately 1/3 of all deaths among drug service users could be attributed to an immediate drug related death as defined in the National Drug Strategy. Over 2/3 died from a cause which may be regarded as a delayed drug related death in the more usual BBV or bacterial infection sense or what may be regarded as a "drug-associated death" (i.e. the death was likely to have occurred due to prolonged drug use and/or behaviour associated with drug use).¹ (Khundakar et al., 2006).¹

This reinforces Blackpool's position that Immediate Drug Related Deaths resulting from overdose are just the tip of the drug related harm iceberg.

In 2005/06 over 1,500 individuals engaged in drug treatment services in the Blackpool. This is approximately 68% of estimated problematic drug users in the town. Therefore any action undertaken to reduce drug related deaths should be seen in this wider context of reducing drug related harm across this local population.

¹ Khundakar (2006) **NDTMS Themed Report: Deaths of those in contact with drug treatment services in the North West of England for the reporting period 2003/04 and 2004/05**, Liverpool John Moore's University.

Immediate Drug Related Deaths In Blackpool

In 2002 Blackpool and Fylde² had the third highest rate of Drug Related Deaths in the country having risen from 4th in 2001, and 5th in 2000. In 2003 however, Blackpool and Fylde dropped to 7th place with a death rate of below 10 per 100,000.³ However, this drop in rank and death rate was not maintained in 2004 and Blackpool rose to fourth place in the national table and in 2005 moved up again back into third place.

Death rates for Blackpool and Fylde

Per 100,000 population as reported By St George's Hospital:

1999	18.7	2000	13.9	2001	16.5	2002	14.7	2003	9.94	2004	11.14	2005	12.8
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The NTA regards any date rate of 10 or above as a problematic hotspot.

The National Drug Strategy Target

The National Drug Strategy 'Tackling Drugs to Build a Better Britain' set a target for local areas to reduce drug related deaths by 20%.

This will be measured comparing 2004 against a 1999 baseline, and will be reported on in 2006.

Local data for 2004 suggests that this target will not only be met, but exceeded. However, given that this reduction has not been sustained, further work is required.

Blackpool Only figures for Drug Related Deaths

	1998	1999	2000	2001	2002	2003	2004	2005
Number of deaths	20	20	19	16	Not	14	15	21
Annual % decrease Against 1999		0	5	20	available	30	25	+5

² The local Coroners district by which such figures are reported includes Blackpool and Fylde, hence this ranking refers to Blackpool combined with Fylde.

³ An annual death rate of 10 per 100,000 is the level at which the NTA regards an areas as a 'hotspot' and thus cause for active concern.

2. The Local Profile

The summary below identifies the profile of deaths in Blackpool only which are compared with the national figures for the UK.

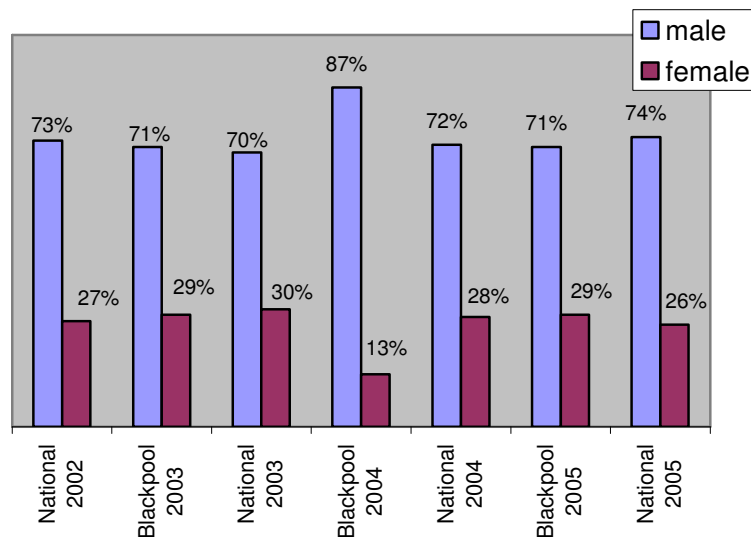
The local figures presented for 2003, 2004 & 2005 are derived from receiving copies of the forms submitted to St George's Hospital by the Coroner. This allows us to profile the basic characteristics of Immediate Drug Related Deaths in Blackpool. The deaths are all confirmed as drug related through the use of toxicological examination at post mortem.

Summary of local findings compared to national data

The analysis below will draw attention to substantial differences between the local experience and the national picture and any changes over the 3 years of data from 2003 to 2005. It should be remembered that whilst the numbers of deaths in Blackpool are regrettable they provide a small sample in terms of statistical analysis and are thus subject to random deviation. This is where small changes have a large effect on the figures.

However, this is a representative sample of what has happened in Blackpool in between 2003 and 2005 in that it captures all cases that fit the definition of a drug related death as proven by toxicological investigation. The only exclusion to this is where deceased individuals lay undiscovered for some time and thus the toxicology results were inconclusive. In 2003 this was the case with one individual believed to have died from a drug related death and for one case for 2004. There appears to have been no such cases in 2005.

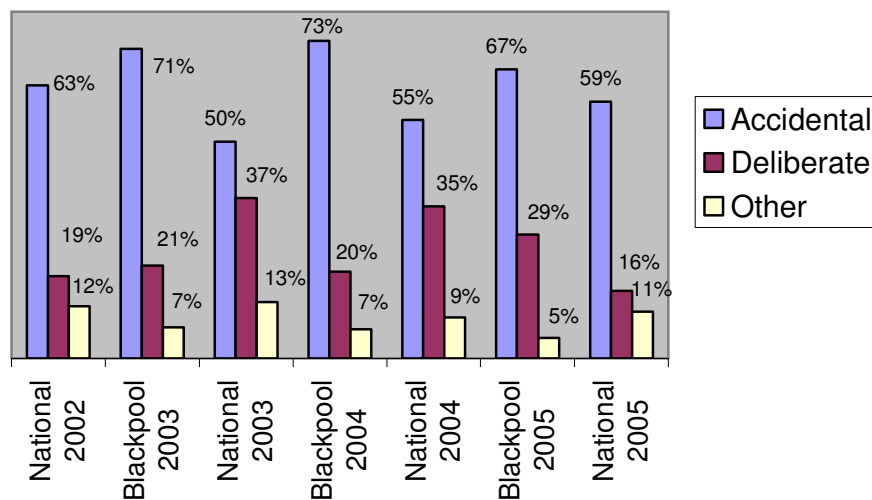
3. Drug Related Deaths By Gender



3.1. In relation to the gender of drug related deaths, Blackpool generally mirrors the national trend, with the exception of 2004, with a greater proportion of males than females dying from drug related deaths.

3.2. It is generally accepted (Best, 2005)⁴ that drug use is split 2/3 male and 1/3 female and drug related death rates generally reflect this split with males slightly disproportionately experiencing drug related death. Again with the exception of 2004, Blackpool generally reflects this picture.

4. Drug Related Deaths as Accidental or Deliberate



4.1. Despite a 13% drop in accidental deaths as a proportion of all deaths nationally between 2002 and 2003, the first decrease in 5 years, this has been followed by rises in subsequent years. In Blackpool, there have been no such shifts and instead accidental deaths, already higher than the national level, have remained relatively stable at 71%, 73% and 67% in 2003, 2004 and 2005 respectively.

4.2. One issue that remains unclear is the degree to which opiate deaths among those with drug using histories, may be intentional. All but one opiate death in Blackpool between 2003 and 2005 has been classified under the St George's model as accidental, although research into non-fatal overdose implicates opiates in attempted suicides and indifference regarding survival.

4.3. Given that Blackpool has significant levels of suicide, above the national average, and substance misusers have access to potentially fatal substances, the use of such substances for deliberate rather than accidental death appears under determined.

4.4. Within the context of widespread polydrug use and extensive self medication with benzodiazepines in Blackpool it is notable that a study of London and Edinburgh treatment centres found that 26% of respondents reported deliberate overdose and that those who reported deliberate overdoses reported greater levels of anxiety and depression and were

⁴ Best (2005) **Women in Drug Treatment Services**, The National Treatment Agency, June 2005

more likely to be prescribed temazepam and be depressed.⁵ Interestingly 65% of those who reported deliberate overdoses were in treatment at the time compared to just 35% of deliberate overdoses who were not in treatment at the time of interview.

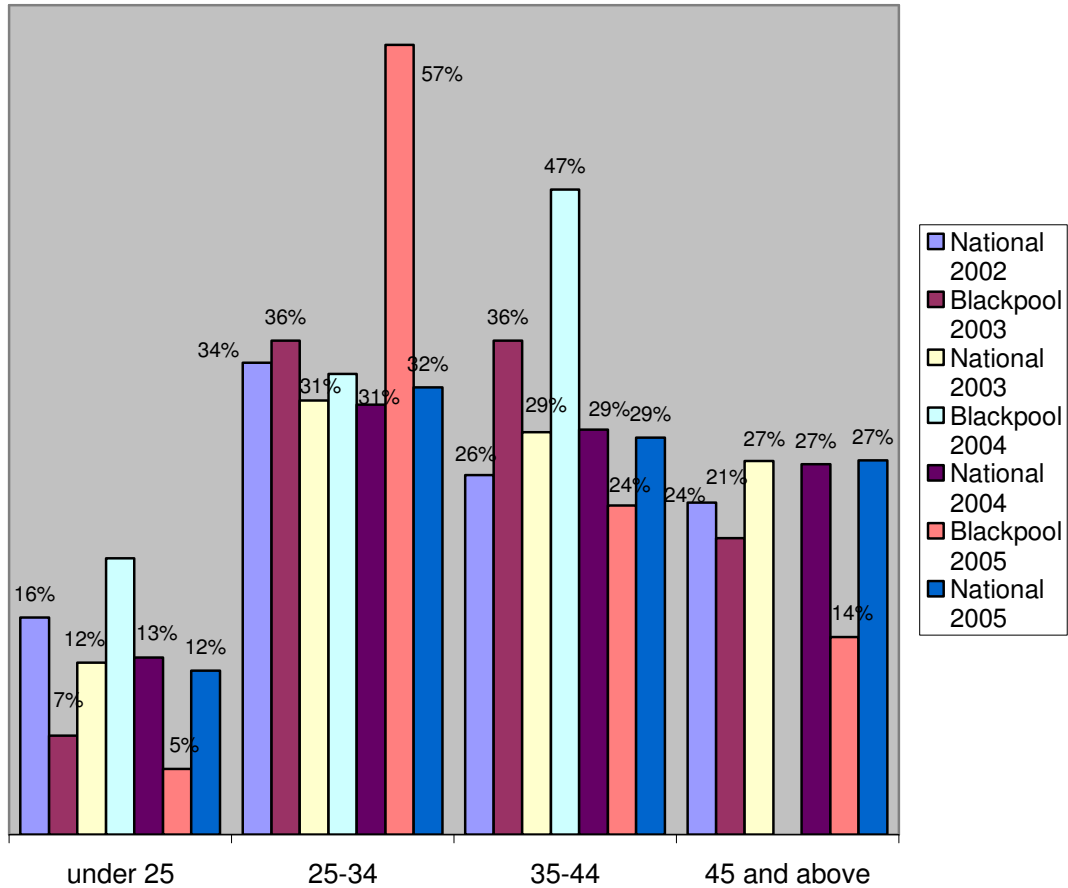
- 4.5. One study of non-fatal overdoses among those in methadone treatment found that 42% of non-fatal overdoses were deliberate. This was especially associated with overdoses among those topping up on their prescription by using illicit drugs and medication.⁶ A Norwegian study of treatment populations found that 33% of non-fatal overdoses were suicide attempts with over half these individuals having made more than one attempt.⁷
- 4.6. In Blackpool in 2005 for example, benzodiazepines featured in 1/3 of all deaths and anti-depressants in 1/5, including notably in combination with opiates. Moreover, the Confidential Inquiry process has identified cases where clear suicidal ideation and previous recent suicide attempts were known to service providers but the inquest delivered a dependence on drugs verdict indicating accidental rather than deliberate overdose.

⁵ Best, *et.al.* (2000) 'Accidental and deliberate overdose among opiate addicts in methadone maintenance treatment: are deliberate overdoses systematically deliberate', in *Drug and Alcohol Review*, 19:2.

⁶ Neale, J. (2000) 'Methadone, methadone treatment and non-fatal overdose', in *Drug and Alcohol Dependence*, 58:117-124.

⁷ Rossow, I. (1999) 'Balancing on the edge of death: Suicide attempts and life threatening overdoses among drug addicts', in *Addiction*, 94(2).

5. Drug Related Deaths by Age



5.1. The proportion of deaths among the under 25 age group rose from 7% to 21% between 2003 and 2004 but returned to 5% in 2005. Thus while in 2004 Blackpool showed a higher proportion of deaths in this age group than was nationally the case, this has now returned to lower than the national level.

5.2. Over the three years 2003- 05 deceased individuals in this age group have ranged from 20-22 years old.

5.3. Also notable is that Blackpool had no deaths among the 45 and above age category in 2004. This may be a reflection of the lower levels of deliberate prescribed drug deaths which in 2003 and 2005 in Blackpool accounted for most of the deaths in this age group.

5.4. In 2004 the greatest divergence between Blackpool and the national picture was among the 35-44 year old age group. The concentration of deaths (47%) locally was 18% greater than the 29% nationally; previously the distribution had been more comparable. Nationally generally the 25 – 34 and 35 – 44 age categories experience similar levels of death with the former slightly higher than the latter.

5.5. Over 60% of the 35-44 year old age group in 2004 had overdosed on combinations of substances, including opiates, with the circumstance of death suggesting or indicating IV use.

Of the remaining deaths in this age group 30% involved stimulants and 14% prescribed medication only.

5.6. 2005 however, saw a stark divergence with the national picture in relation to deaths in the 25-34 year old category. The national and previously the local level has hovered around 30% but in Blackpool for 2005 the level was 26% higher than the national level at 57% compared to 31%.

5.7. A closer examination of the deaths within the 25-34 year old age group in 2005 shows that:

- 45% had had no contact with drug services and just 27% had what could be considered significant contact with drugs services in terms of being known to tier 3 services and having received sustained or varied service provision.
- 9% of clients were in prescribed treatment at the time of death and overdosed on their medication combined with alcohol.
- 27% were alcohol service clients with no concurrent contact with drug services, all of whom died from a combination of alcohol and heroin.
- 27% were released from prison with 1/3 of this group having received a referral to Inward House services on release.
- 18% of these cases identified themselves to services as high risk prior to death for example, expressing suicidal ideation or requesting naltrexone approx 6 months after having successfully detoxed.

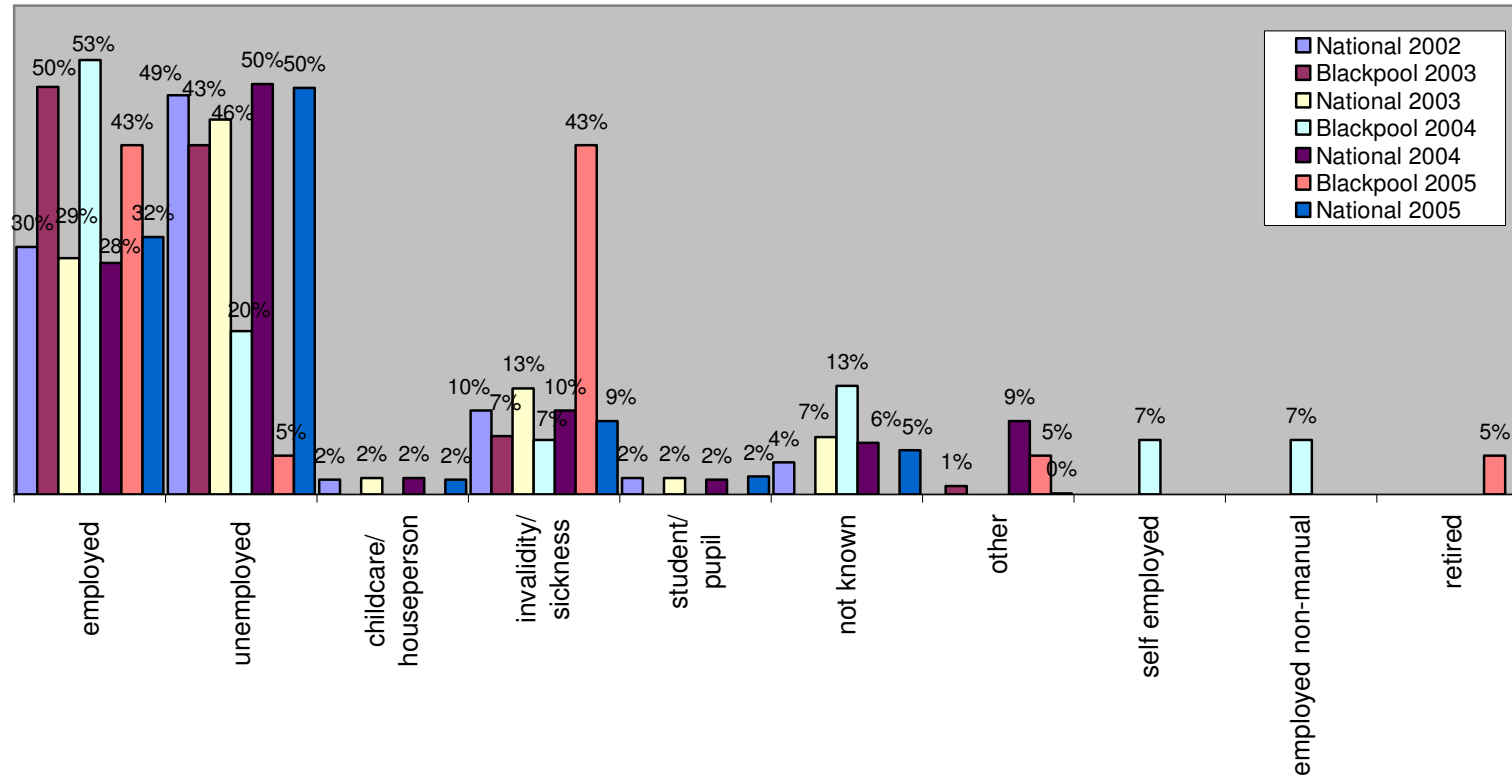
(Note some clients feature in more than one of the categories above, so combined the percentages will exceed 100%)

5.8. That the age at death is decreasing is reflected in the reduction of the mean age of death from 37.14 years in 2003, to 33.4 years in 2004 and if one removes 2 cases of suicide deaths amongst the older age group for 2005 the mean would be 31.65 years.

5.9. In addition it is notable that the mean age of death among women is significantly lower than among men, 2 years younger in 2003, 7 years younger in 2004 and 3 years younger in 2005. This is contrary to most datasets including St George's where the mean age of death for women is generally higher than that for men.

5.10. On the basis of Blackpool's lower than national average life expectancy rates, drug related deaths in Blackpool constituted 563 life years lost in 2004, a rise from 538 years in 2003. In 2005 the combined effects of a greater number of deaths and the younger age at death meant that life years lost rose to 804 years.

6. Drug related deaths by Occupational Status

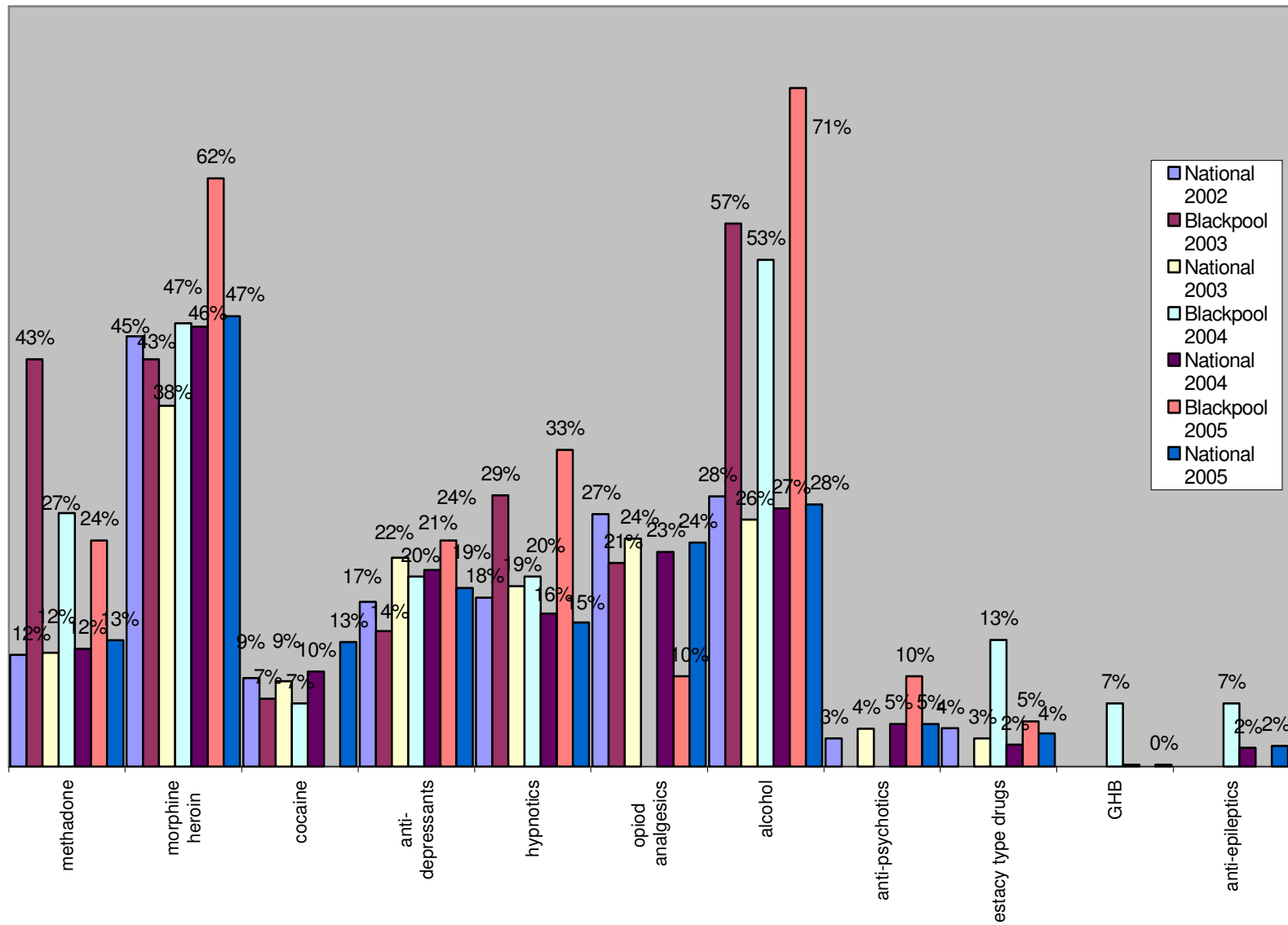


6.1. In 2002 and 2003 nationally just 29% and 30% of deaths respectively were among those in employment. In Blackpool this stood 20% higher at 50% for both 2003 and 2004. This pattern was maintained in 2005 with 43% of those who died from a drug related death in Blackpool in employment compared to 32% nationally.

6.2. Also significant is that just 5% of deaths in Blackpool were among those deemed unemployed compared to 50% nationally.

6.3. However, in 2005 Blackpool had significantly more deaths among those on invalidity or sickness (43%) than nationally (9%). This is a new feature of deaths with previous years having been lower than nationally.

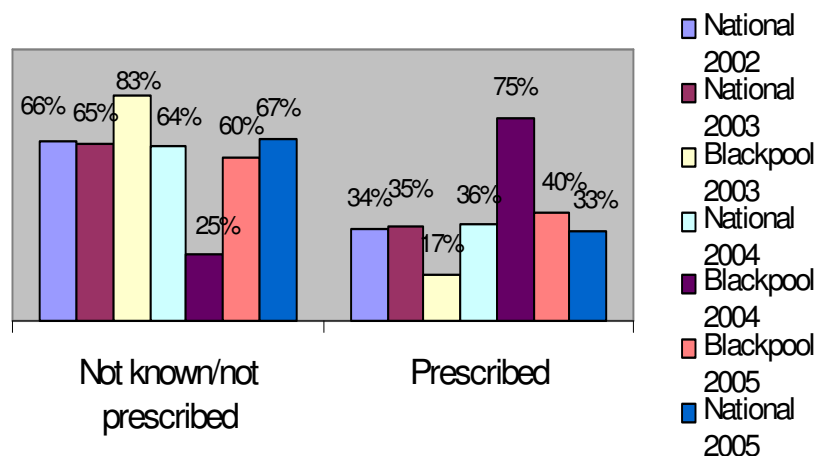
7. Substance implicated in Deaths



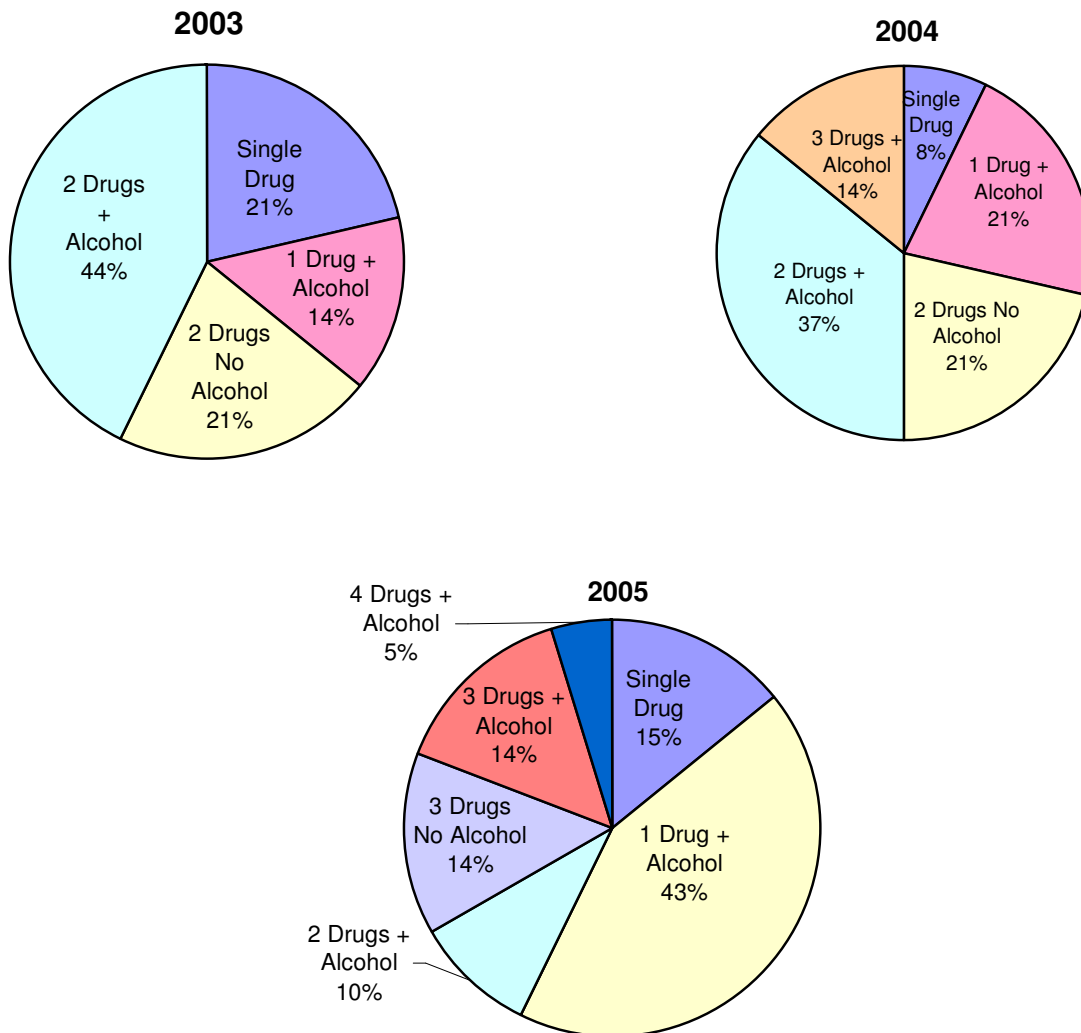
- 7.1. **Methadone** - In 2004 there was a drop in the proportion of deaths in which methadone was implicated from 43% to 29%. This drop has been maintained into 2005 at 24%.
- 7.2. Whilst this is a move in the right direction, this level remains higher than was the case nationally in 2002 - 2005, such that the local proportion of methadone related deaths during this period has remained approximately than double the national level.
- 7.3. Between 2003 and 2005 none of the deaths in which methadone was implicated, involved methadone alone, but in combination with alcohol, heroin, benzodiazepines and tri-cyclic anti-depressants. In no cases were the prescription drugs implicated actually being prescribed to the individual concerned at time of death. Thus whilst prescribed methadone, these individuals were not complying with the treatment regime. This suggests that capacity for recommending clients on supervised consumption due to non-compliance with treatment needs to be retained.
- 7.4. **Diverted methadone** - Since 2003 the degree to which these methadone deaths were among those not prescribed has notably decreased (see graph 6). The proportion of methadone related deaths among those known to be prescribed and those not prescribed or not known to be prescribed has shifted significantly between 2003 and 2004 from 35% prescribed to 75% prescribed. This impressive decrease in Blackpool has not been maintained in 2005 but it must be noted that these deaths are a small subsection of deaths overall and therefore especially vulnerable to random variation. Thus if one were to remove the one case in 2005 of a death caused by methadone diverted within a family to a person with a history of suicide attempts the figures for 2005 would look much the same as those for 2004. However, this raises serious issues about the safe storage of medication within the home.
- 7.5. Moreover this issue and that of deliberate opiate overdose involving illicit benzodiazepines and anti-depressants should further raise concerns regarding potential dual diagnosis issues discussed earlier.
- 7.6. **Heroin** - Heroin related deaths in Blackpool between 2003 and 2005 have been consistently higher than national levels with the divergence increasing from 5% in 2003 to 15% in 2005. However, this higher level of heroin related deaths is not compensated for by significantly lower levels of deaths involving other substances. Instead there appears to be a high levels of poly drug use, see below.

- 7.7. 2005 has seen a reduction in stimulant related deaths following a peak in 2004. Having exceeded national levels it is now more consistent with the national picture.
- 7.8. Despite being a crude measure, the substances involved in Drug Related Deaths appear to validate the Glasgow University Study findings that the overwhelmingly majority of problem drug users in Blackpool are heroin users with less and less regular crack use.
- 7.9. **Alcohol** - continues to feature prominently among drug related deaths locally and has risen from appearing in 57% of all deaths in 2003 to 71% in 2005, which is approximately 2 ½ times the national level which remains stable at below 30%.
- 7.10. **Prescribable medications** – Blackpool shows consistently higher levels of deaths involving anti-depressants, hypnotics and anti-psychotics.

8. Source of Methadone in Methadone related deaths



9. Poly Drug Use

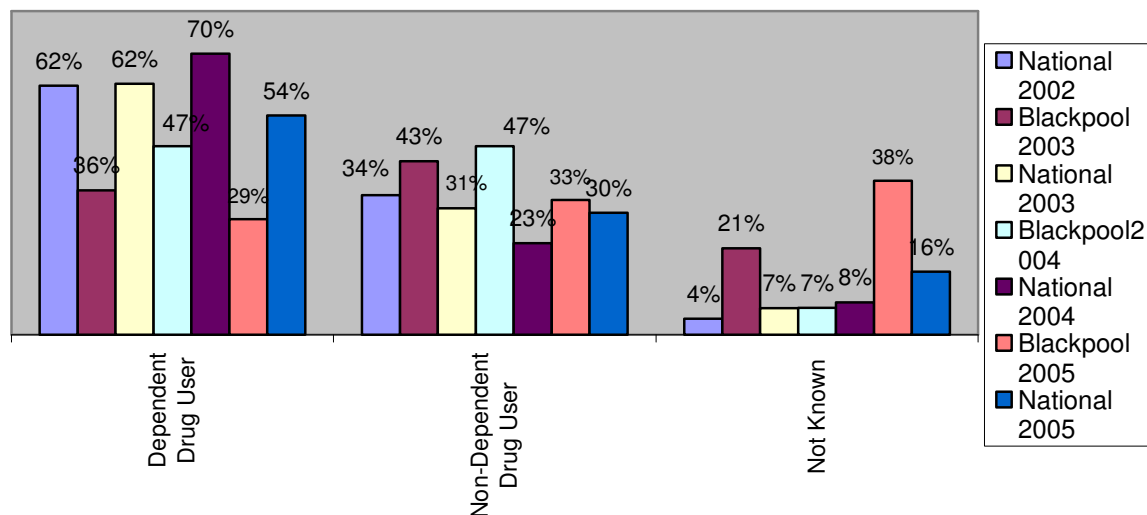


9.1. Between 2003 and 2004 there was a reduction in the proportion of deaths caused by a single drug, from 21% to 8%, followed by a rise to 15% in 2005.

9.2. The degree to which poly drug use appears to be on the increase rather than decrease is also reflected in the appearance of a three drugs plus alcohol category for the first time in 2004, which accounted for 14% of deaths and a 4 drugs plus alcohol category for the first time in 2005.

9.3. However, 2005 also shows the 1 Drug plus alcohol as the single largest category again raising the issue of concurrent alcohol use with drug use, especially in the context of high levels of opiate use in Drug related deaths where the combined depressive effects prove lethal.

10. Drug Related Deaths By Non/Dependent Drug User

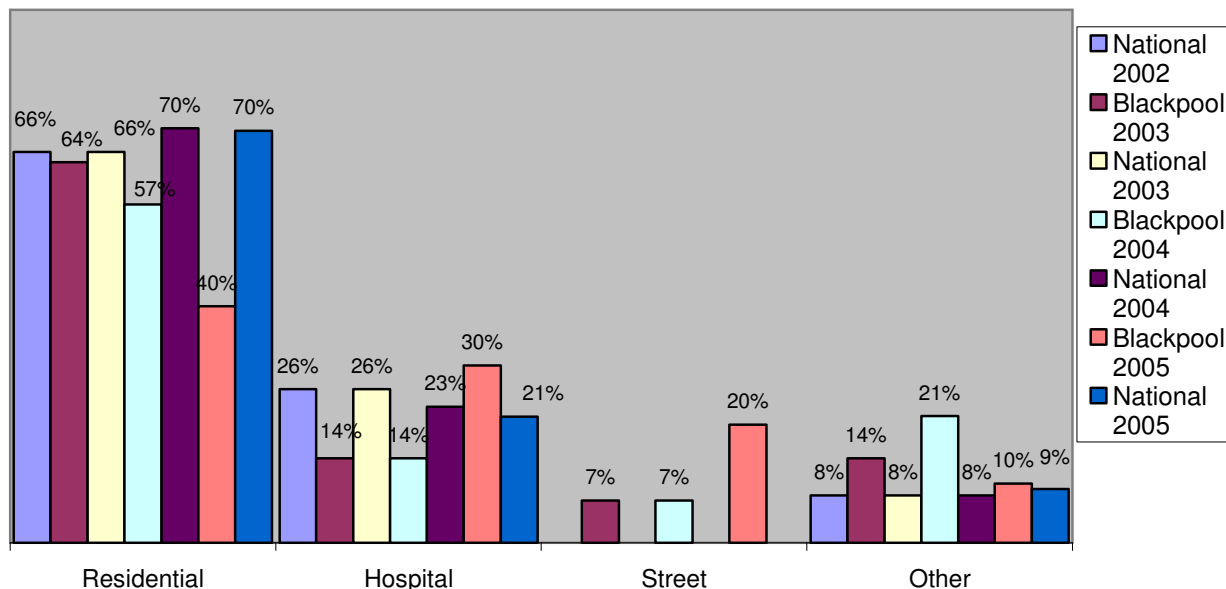


10.1. The proportions of deaths among dependent and non-dependent users showed some increase in the dependent user category in Blackpool between 2003 and 2004, from 36% to 47%, followed by a decrease to 29% in 2005.

10.2. The 'not known' category for 2003 tended to reflect the high levels of homeless (NFA) individuals among deaths, this reduced for 2004 but rose significantly in 2005 such that the drug use history of a third of all drug related deaths was not known to the Coroner.

10.3. Blackpool tends to have lower levels of deaths among dependent users than is the case nationally. Deaths among dependent drug users tend to be associated with opiate deaths whilst non dependent deaths are associated with non-opiate drugs. In Blackpool, given high levels of opiate related deaths one would thus assume there to be higher levels of deaths among dependent drug users, however, opiates are significantly associated with deaths among those in the not known category whose histories of drug use are unclear.

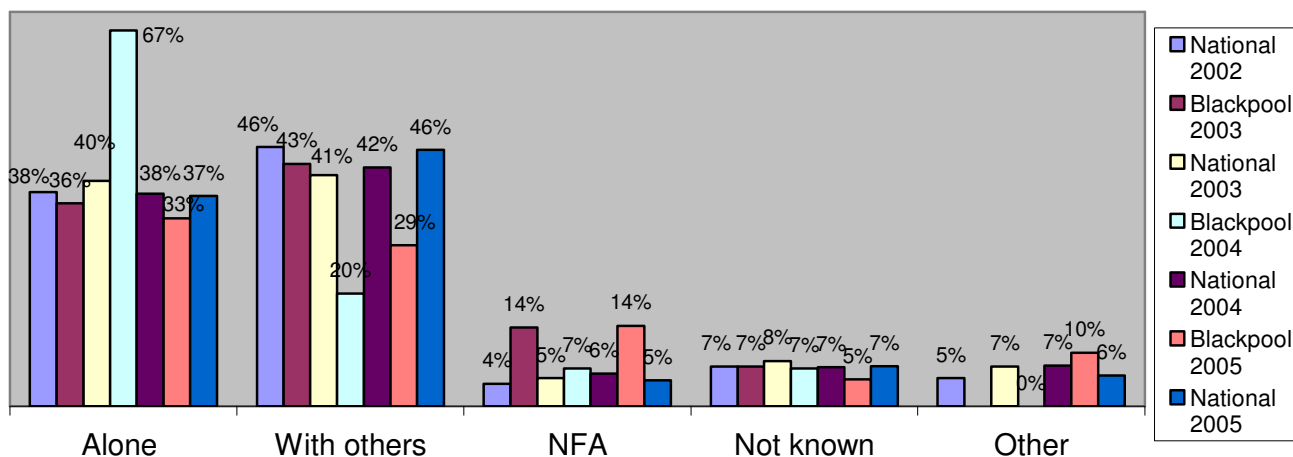
11. Drug Related Deaths by Place of Death



11.1. The vast majority of drug related deaths nationally occur at residential addresses, often the home of the deceased but also the home of friends. This pattern is generally mirrored in Blackpool but drops significantly in 2005 to 30% lower than the national level.

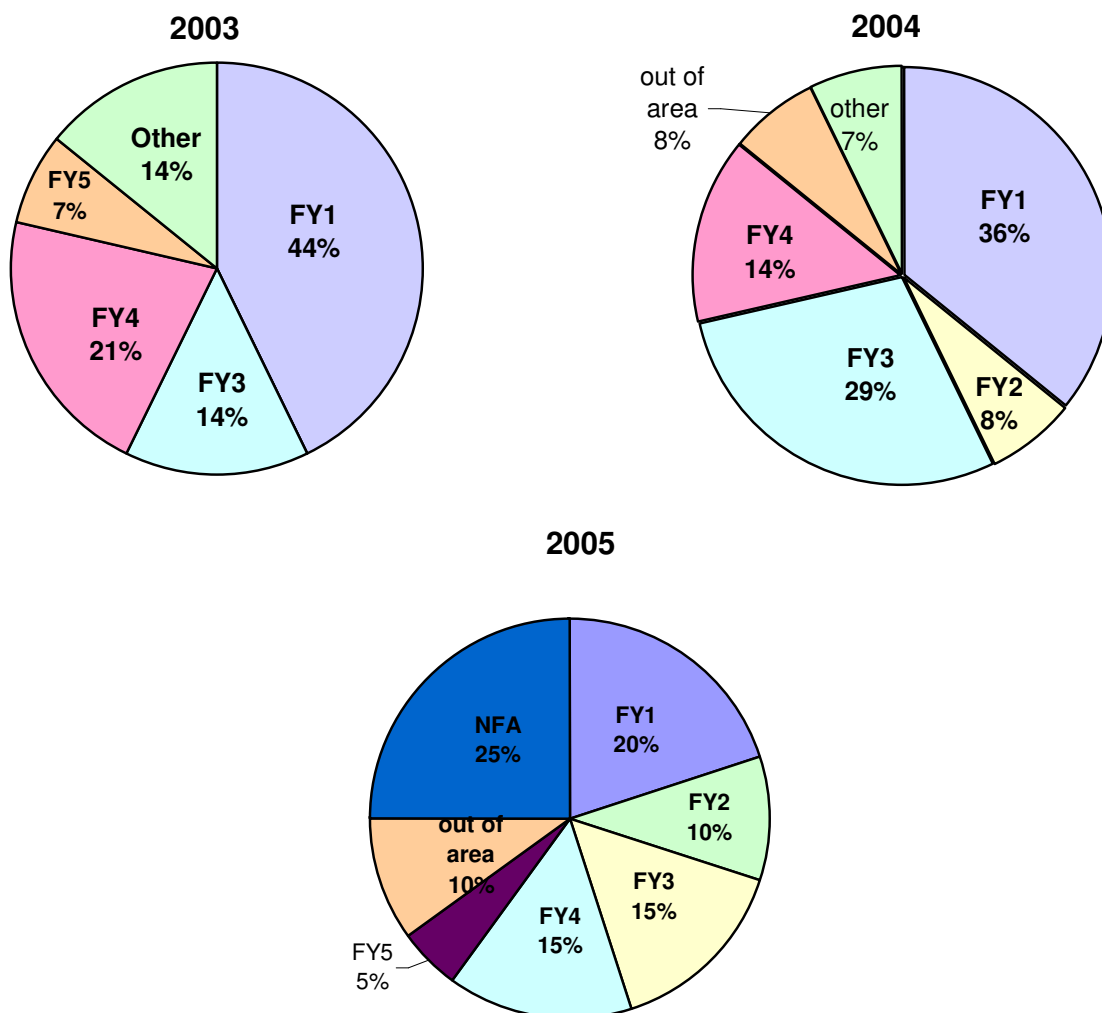
11.2. The higher levels of deaths in public places, categorised above as 'street', in 2003 and 2004 rose yet further in 2005 to 20% or 1/5 of all deaths occurring in public places. This largely accounted for the difference between national residential deaths and it is notable that previously higher than national levels for 'other' i.e. deaths in hostels and squats, hotels and guesthouses dropped to in 2005 to in line with the national level.

12. Drug Related Deaths by Living Arrangements



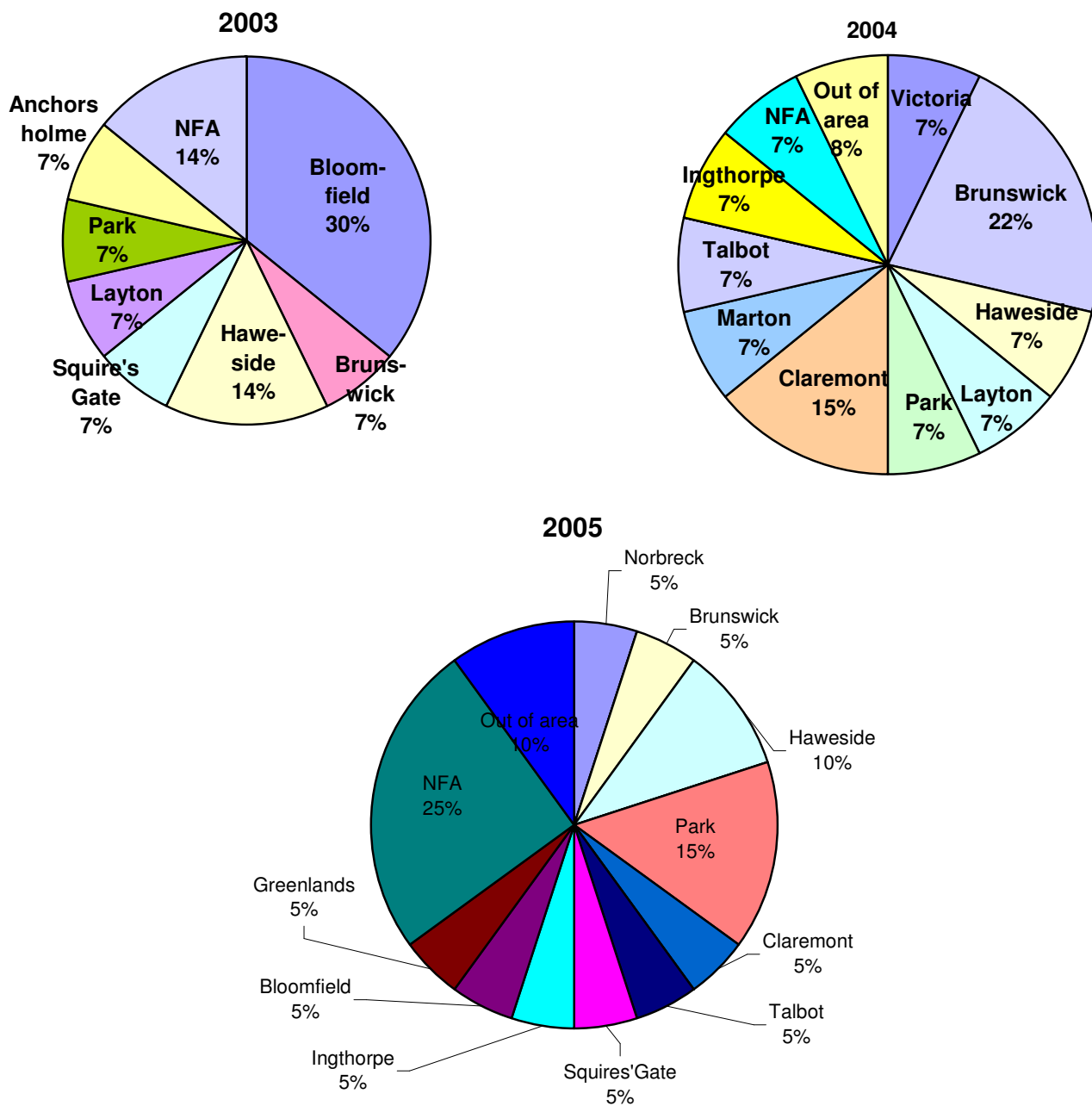
- 12.1. Between 2003 and 2004 there was a 24% increase in deaths of those living alone. 2005 has seen this fall back in line with national levels.
- 12.2. This increase in 2004 was reflected in the decrease of those living with others, and those regarded as NFA. The decrease of those living alone in 2005 was accounted for by an increase in those living with other and NFA.
- 12.3. In this context the definition for NFA is that used nationally which refers to street homeless, i.e. rough sleepers rather than those in temporary or insecure housing.
- 12.4. However, as table 11 demonstrated through higher proportions in the 'other' category for place of death, Blackpool has higher proportions in insecure accommodation with the addition of people visiting the area staying in commercial property.
- 12.5. It should be noted that the higher levels of NFA are not related to the higher levels of public deaths in 2005. Indeed we know that those who die in public places include those who are both housed and homeless.

11 Drug related deaths by Postcode of residence



- 11.1 FY1 continues to feature prominently but the main variation is the increase in NFAs i.e. those in insecure housing and those released from prison without and address which rose to 25% or a quarter of all deaths in 2005.

12 Drug Related Deaths by ward of residence

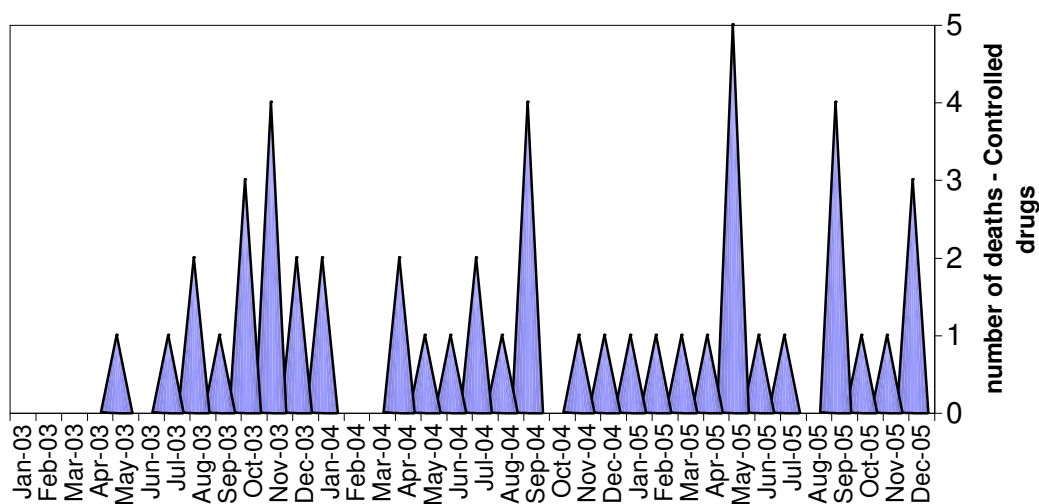


12.1 There has been greater variation in the wards where drug related deaths occurred, including a greater range of wards involved.

12.2 The main change has been seen in Bloomfield ward, which had the highest level of deaths in 2003 but no deaths in 2004. Half of this change can be accounted for in the increase in deaths in Brunswick ward.

12.3 Brunswick and Bloomfield which disproportionately experienced drug related deaths in previous years, dropped back in line with other areas with higher levels in Haweside and Park. Again the highest proportion is accounted for by those with no ward of residence.

13. Temporal distribution of drug related deaths 2003 - 5



13.1 2004 saw a change in the temporal distribution of deaths from 2003. In 2003 the majority of deaths (93%) were in the latter half of the year whilst in 2004 there was a more even distribution in 2004 with 45% of deaths in the first 6 months of the year and 57% in the second half of the year.

13.2 Again 2005 saw deaths across the year with peaks in May, September and December.