



Public Health
England

Protecting and improving the nation's health

Understanding and Preventing Drug-Related Deaths

Manchester

21 April 2016

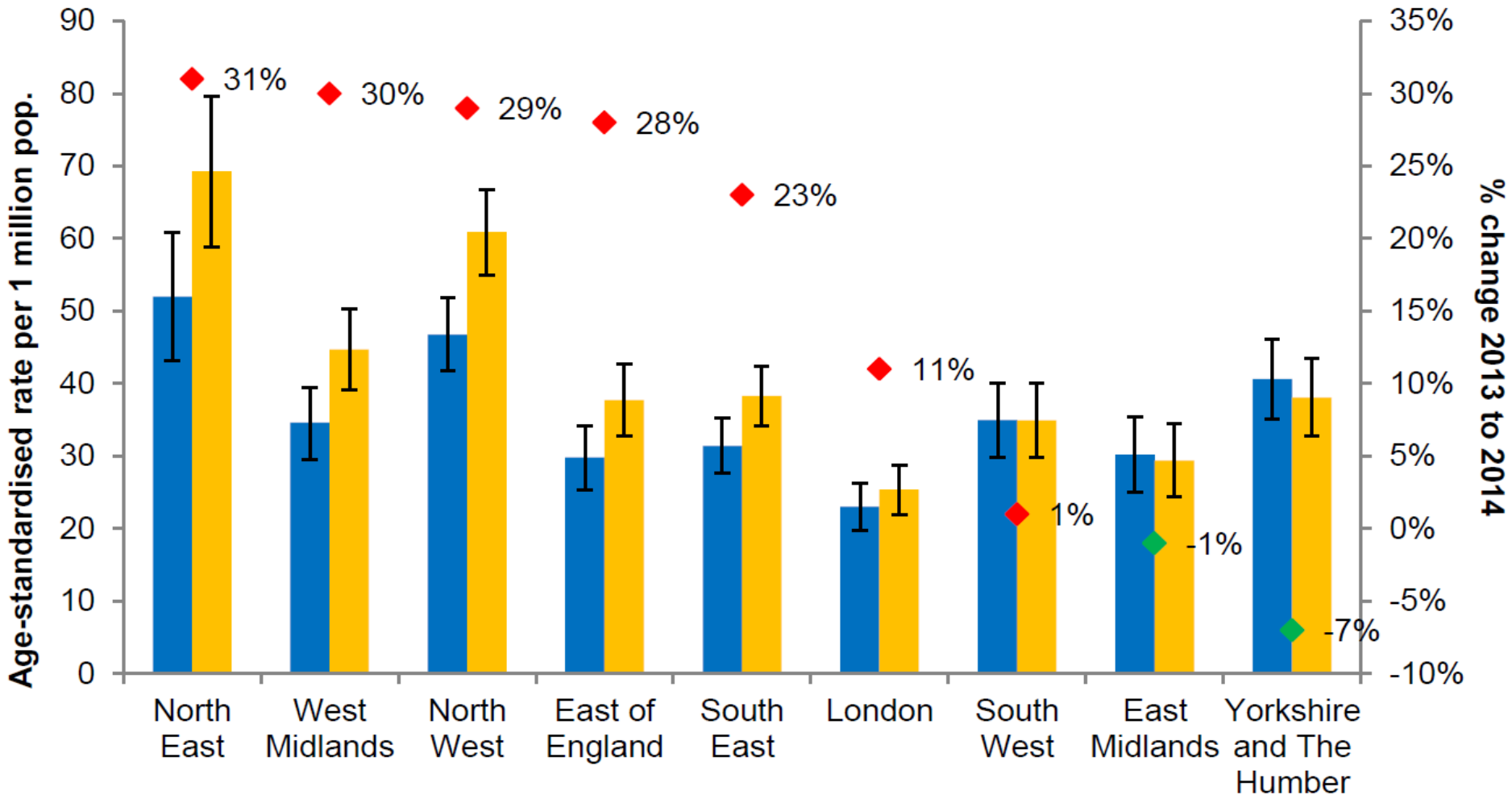
Welcome

Dr Jane Rossini, Centre Deputy Director, North West, Public Health England



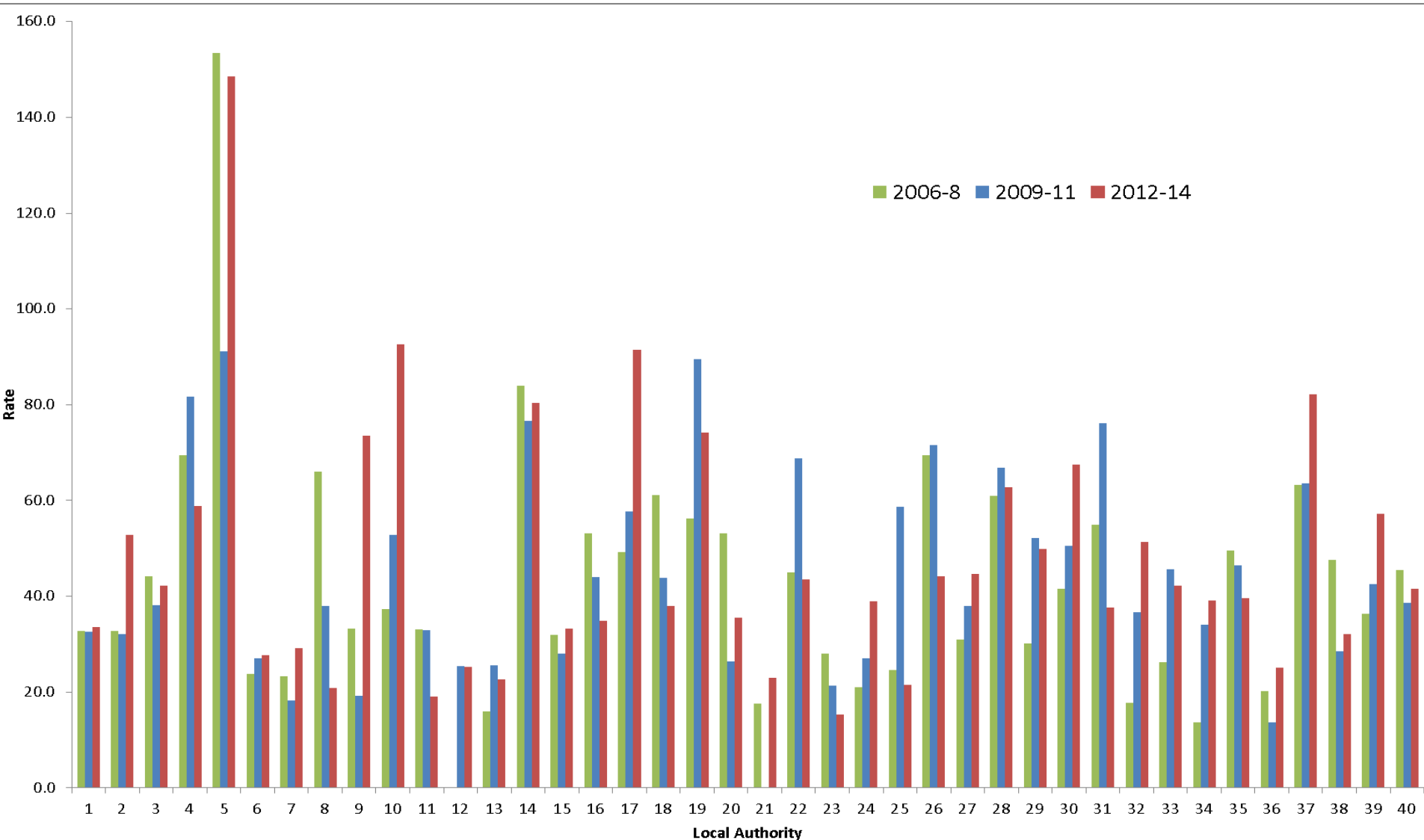
Age-standardised drug misuse death rates (based on registration year), by region

■ 2013 rate ■ 2014 rate ◆ % change 2013 to 2014





Crude mortality rate (per million), deaths related to drug misuse, by NW LA, deaths registered between 2006 and 2014





Today

An opportunity to combine what we know nationally with the innovative work going on locally

Determine some key messages and strategies that are relevant for the North West

Develop an understanding of trends in drug related deaths, who is dying and under what circumstances in order to determine the most effective responses.

You are the key drivers for understanding and preventing drug related deaths in your areas.

You are the ambassadors with partners in the broader health, criminal justice and social care system where many of the solutions lie.



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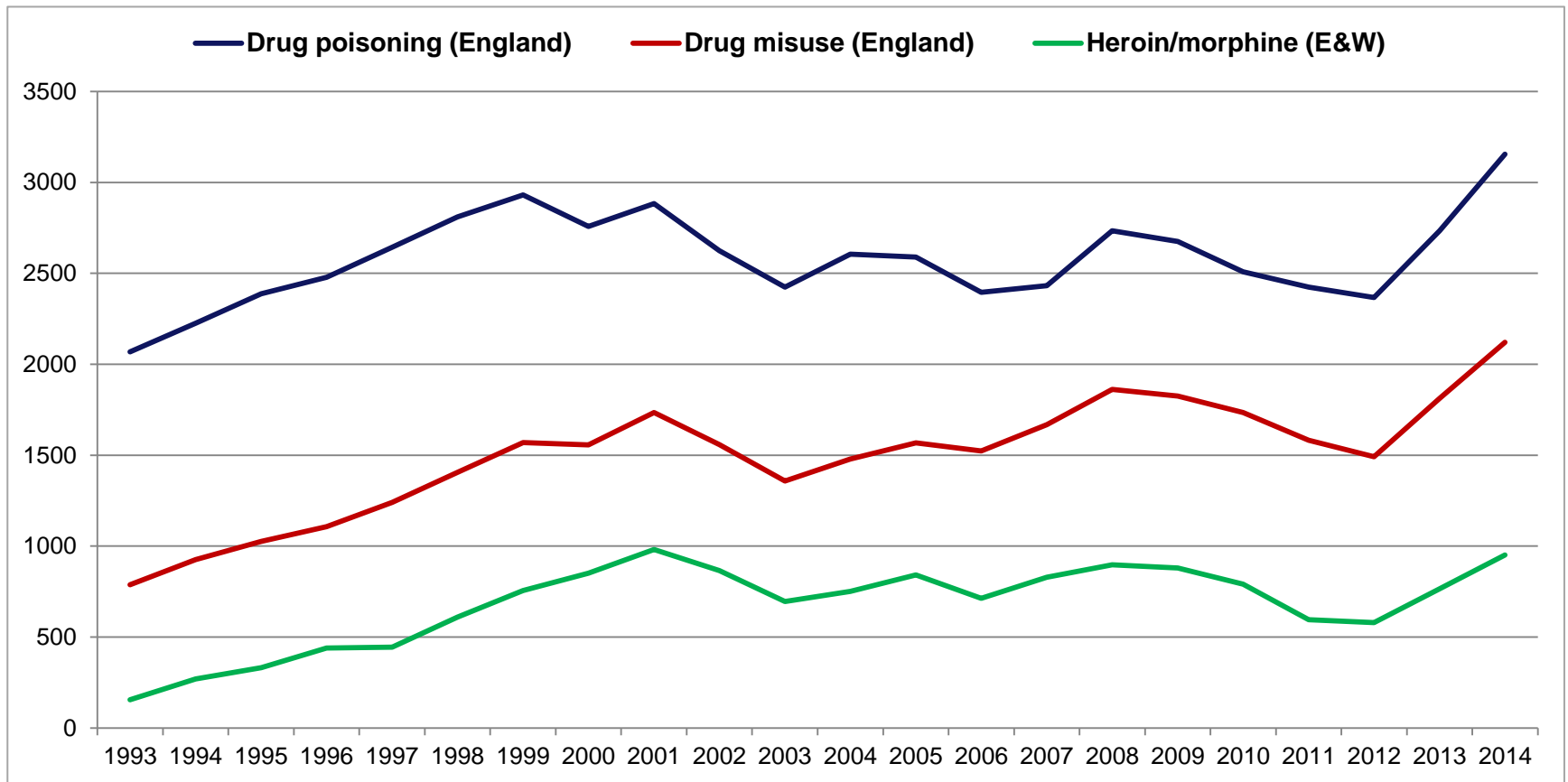
Drug-related deaths in England and the North West: latest data

Martin White, Programme Manager, Evidence Application Team, Public Health England

Data sources on drug-related deaths

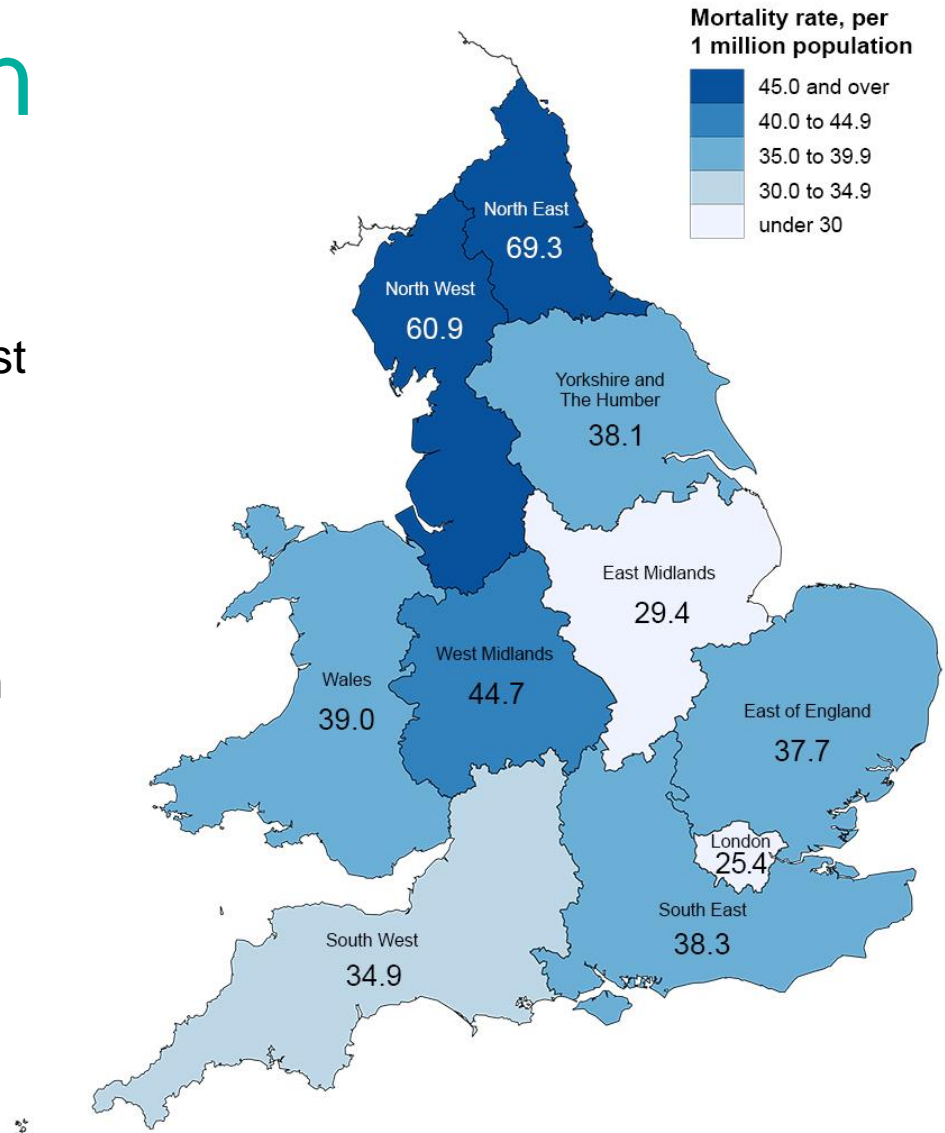
- ONS publish annual national statistics on registrations of drug-related deaths in England and Wales. Latest bulletin is at <http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsrelatedtodrugpoisoninginenglandandwales/2015-09-03>
- PHE receive row-level data from ONS and have published more detailed analyses focusing on deaths from drug misuse in England and cross-referencing with treatment data. The most recent trend publication can be found at <http://www.nta.nhs.uk/uploads/trendsdrugmisusedeaths1999to2014.pdf>
- The National Programme on Substance Abuse Deaths (NPSAD) is a special registry to which the majority of coroners in England report and can be found at <http://www.sgul.ac.uk/research/population-health/our-projects/national-programme-on-substance-abuse-deaths>

Headline figures from recent ONS report

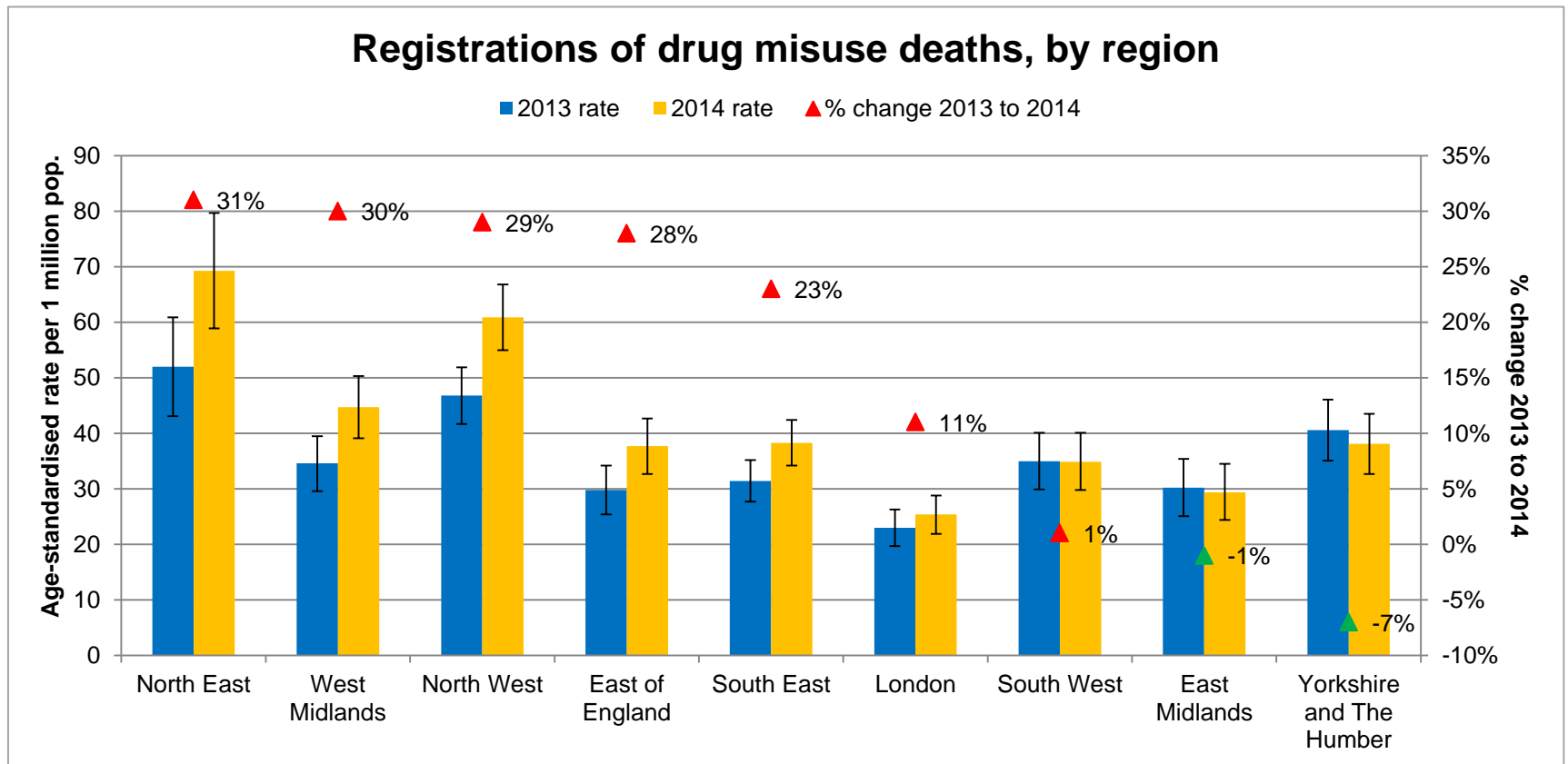


Regional variation

- ONS statistics report that North East and North West have highest rates among the nine regions in England
- Both regions have significantly higher rates than the other seven regions in England
- London has the lowest rate nationally, having fallen significantly over the time ONS have been reporting



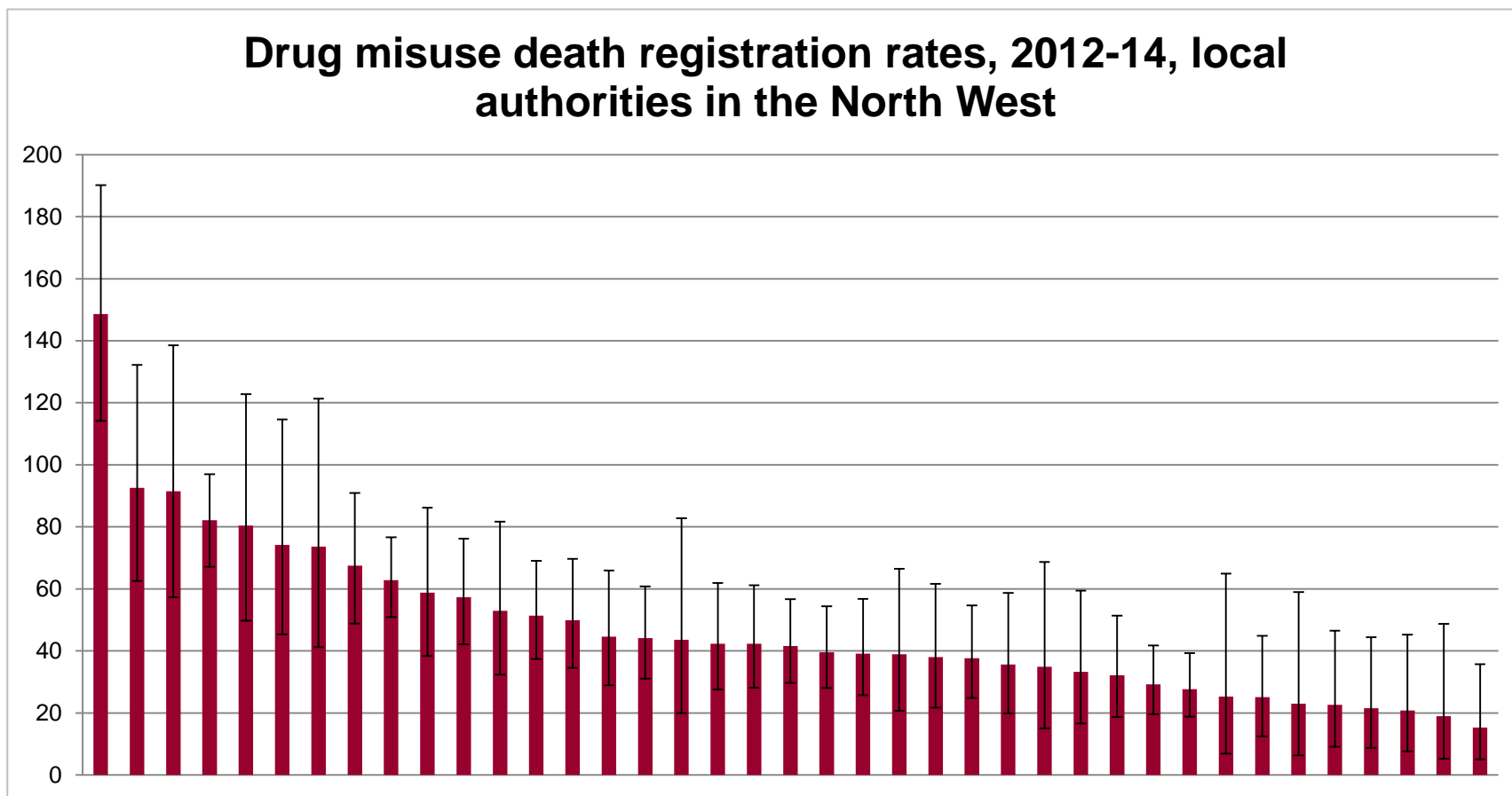
Regional variation



Regional variation – local data

- ONS published figures at lower tier local authority level for the first time alongside their 2015 report – see <http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/drugmisusedeathsbylocalauthority>
- Due to small numbers annually at LA level, figures were pooled into three year bands up to 2012-14 – nevertheless there are still wide confidence limits and the figures require careful interpretation
- Registration delays vary greatly between areas and this may also affect comparability between areas

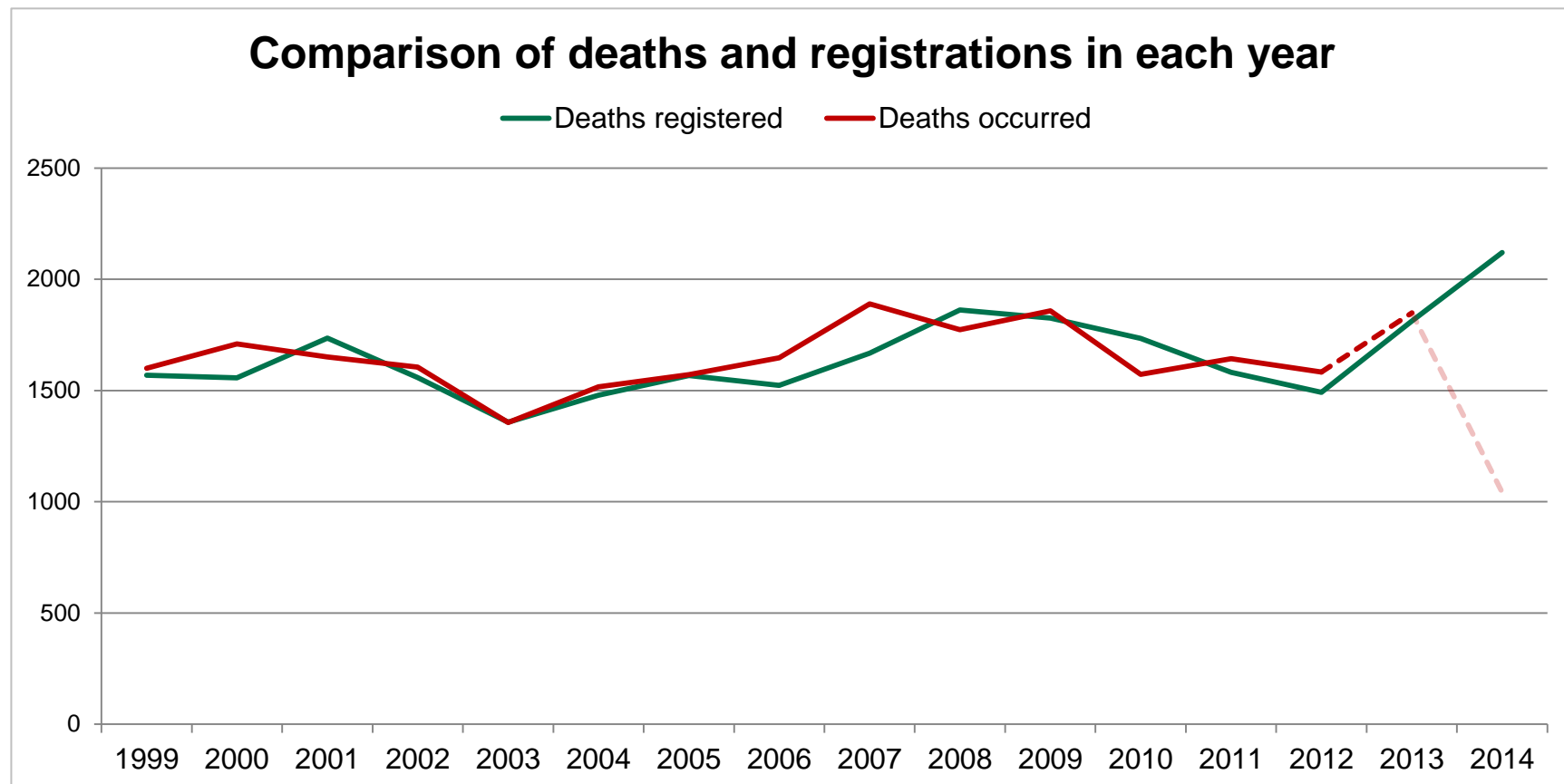
Regional variation – local data



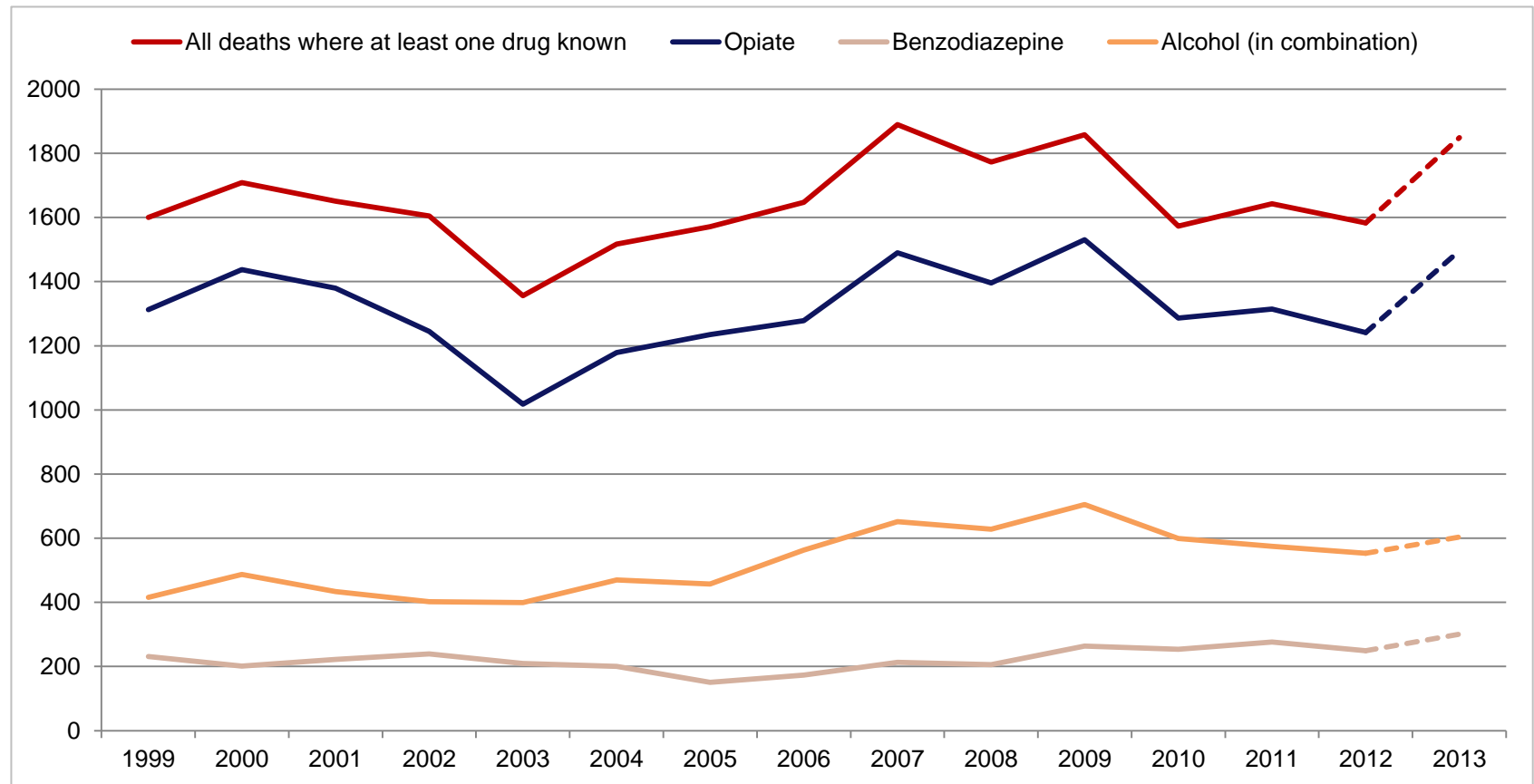
PHE analysis

- PHE acquired extracts of drug-related death data from ONS and carried out more detailed analysis, including matching with drug treatment data from the National Drug Treatment Monitoring System (NDTMS)
- Published two 'Trends in drug misuse deaths in England' reports:
<http://www.nta.nhs.uk/uploads/trendsdrugmisusedeaths1999to2014.pdf>
- Reported by year of death rather than year of registration
- These analyses highlight long term trends and this access to the data allows us to investigate drug misuse deaths in more detail, including by region, as well as to estimate the effect of treatment

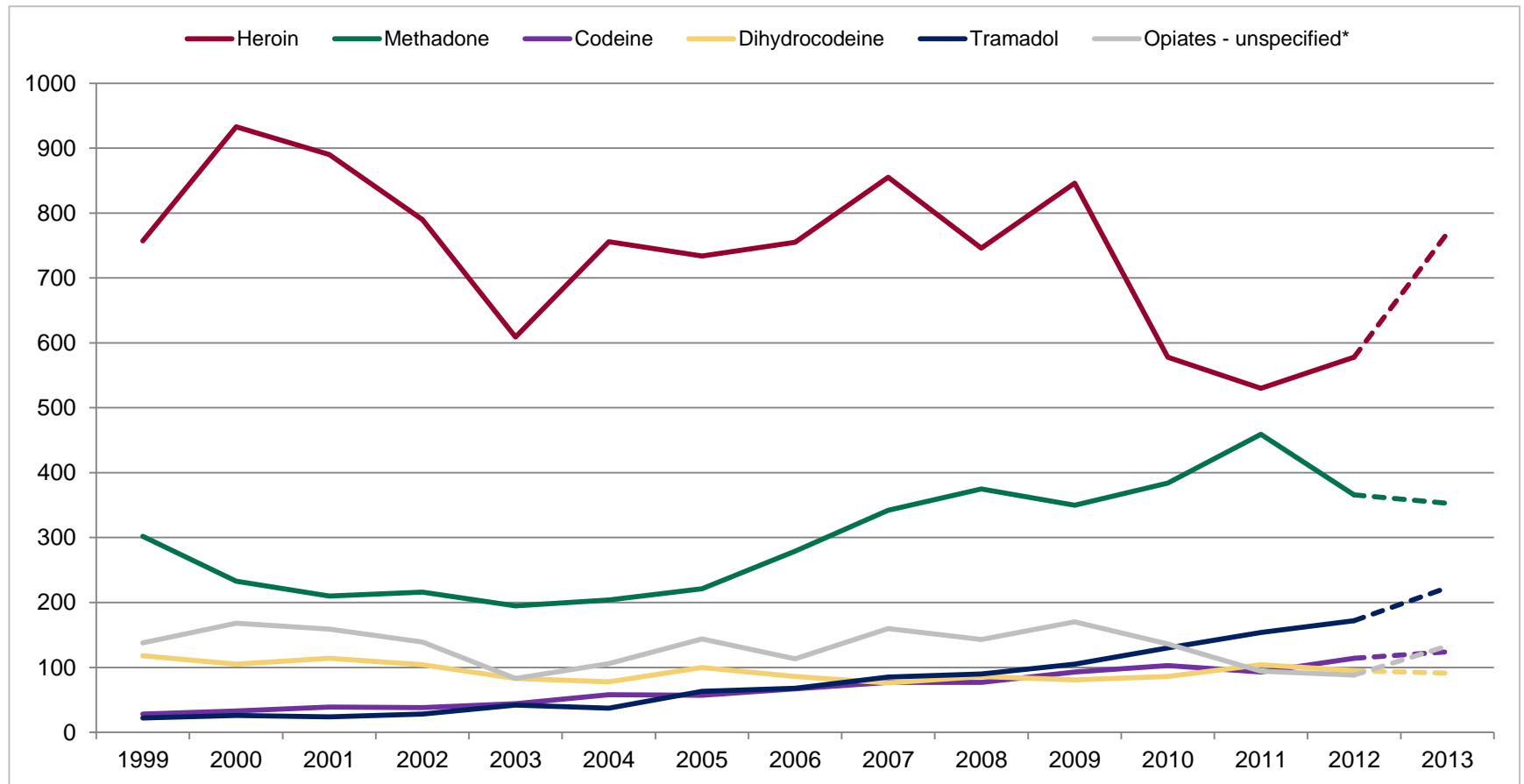
PHE analysis – impact of registration delays



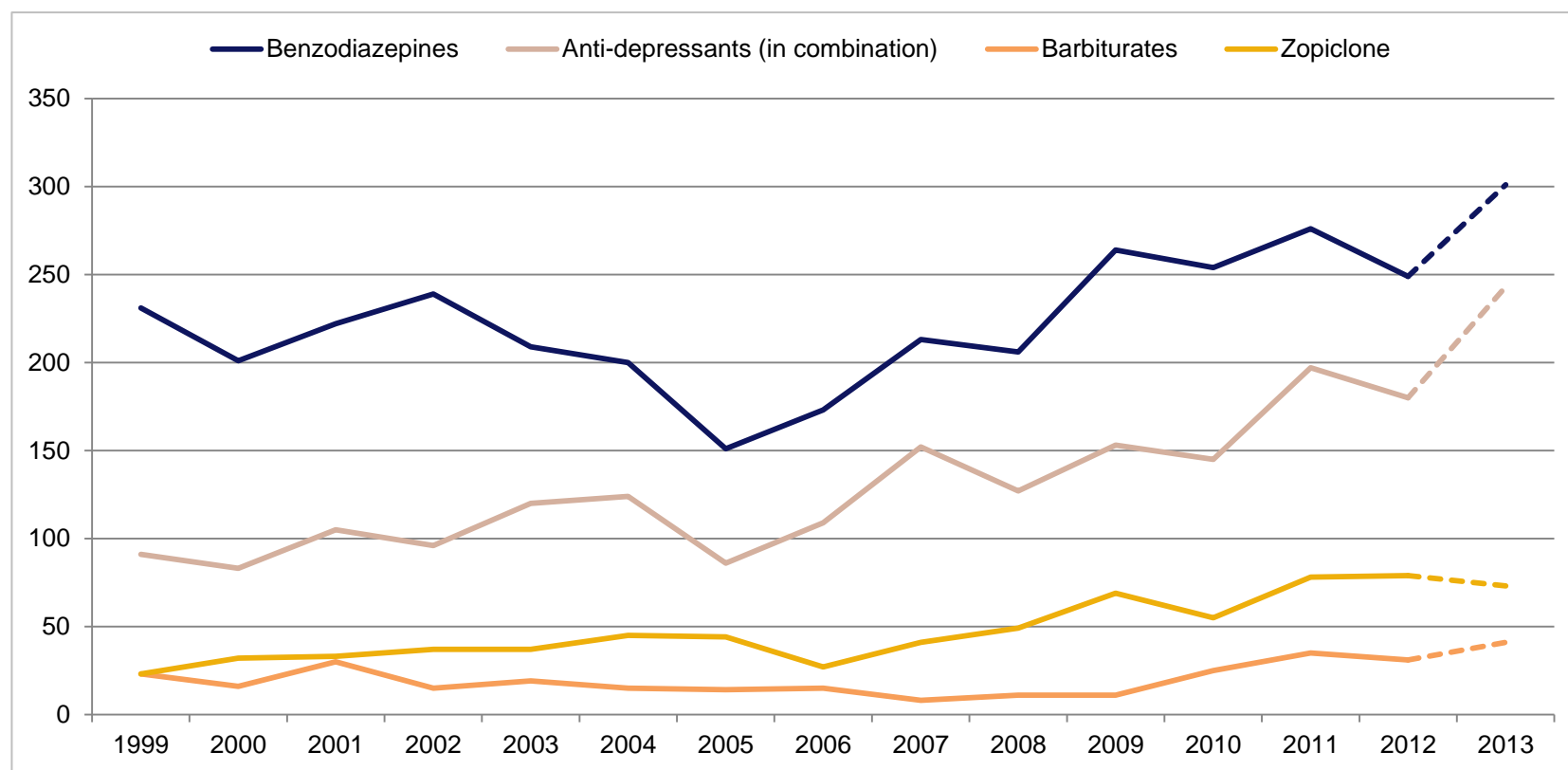
PHE analysis – national – by substance



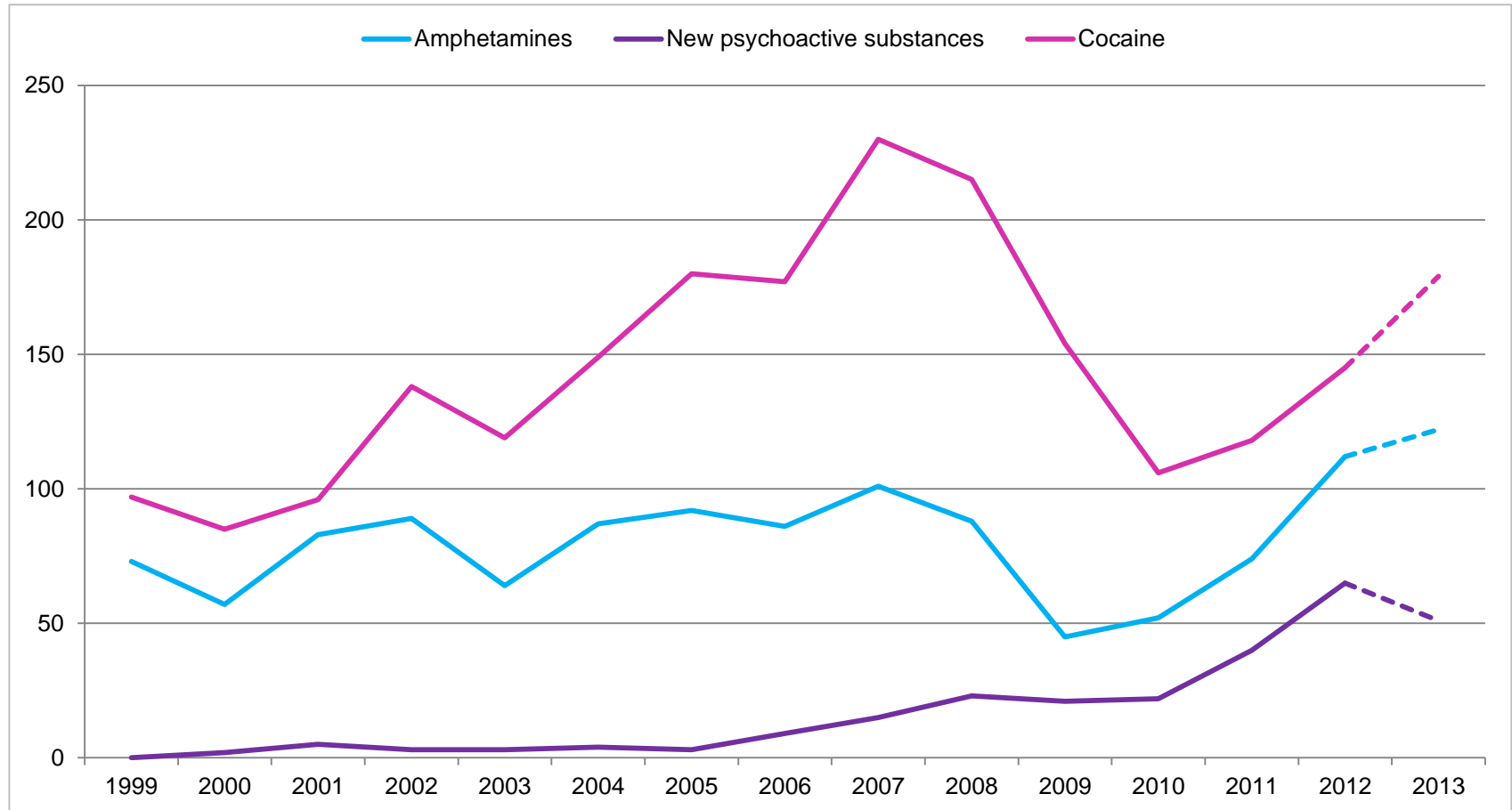
PHE analysis – national – opiates



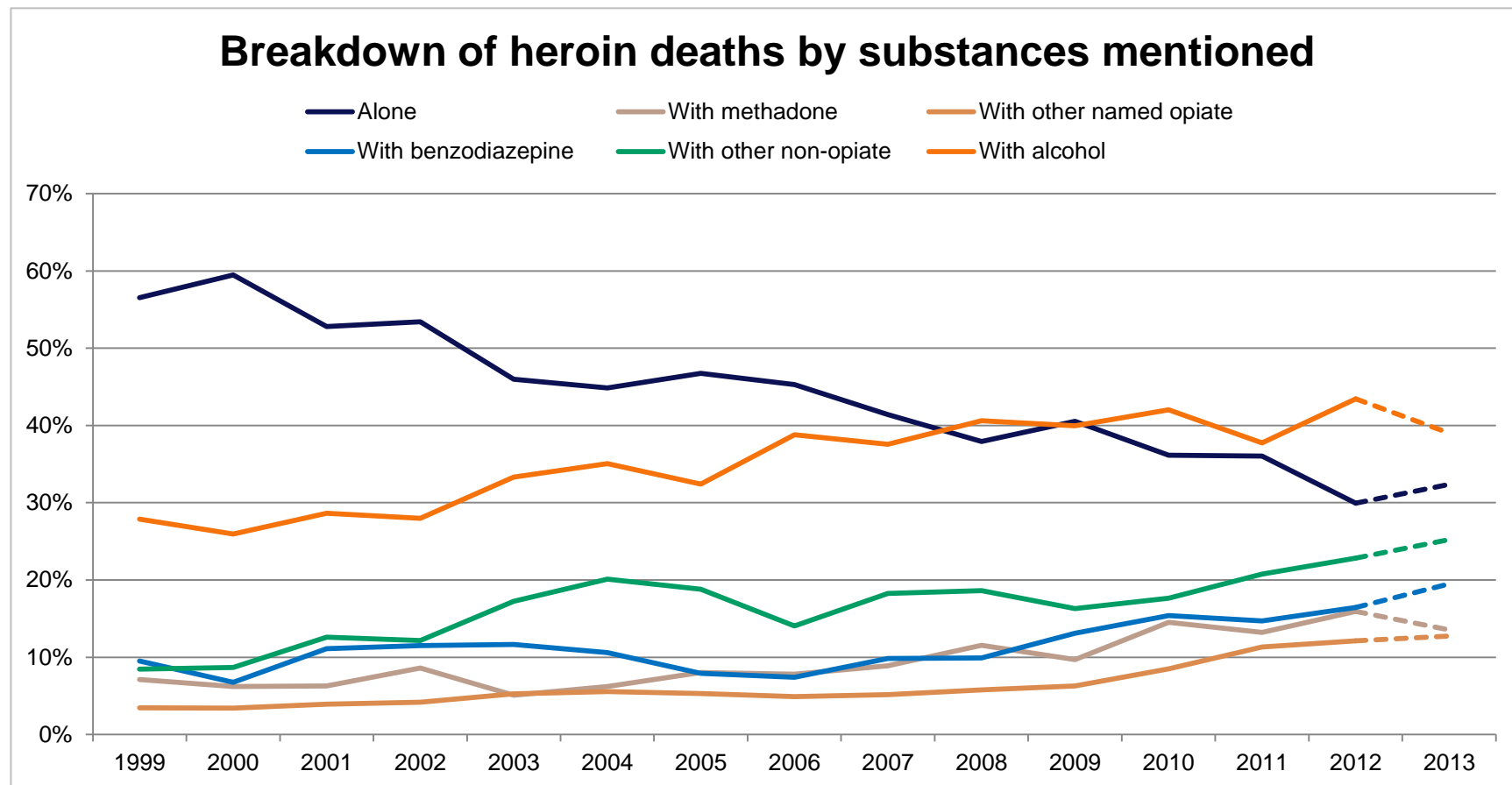
PHE analysis – national – anti-depressants, sedatives and hypnotics



PHE analysis – national – stimulants and NPS

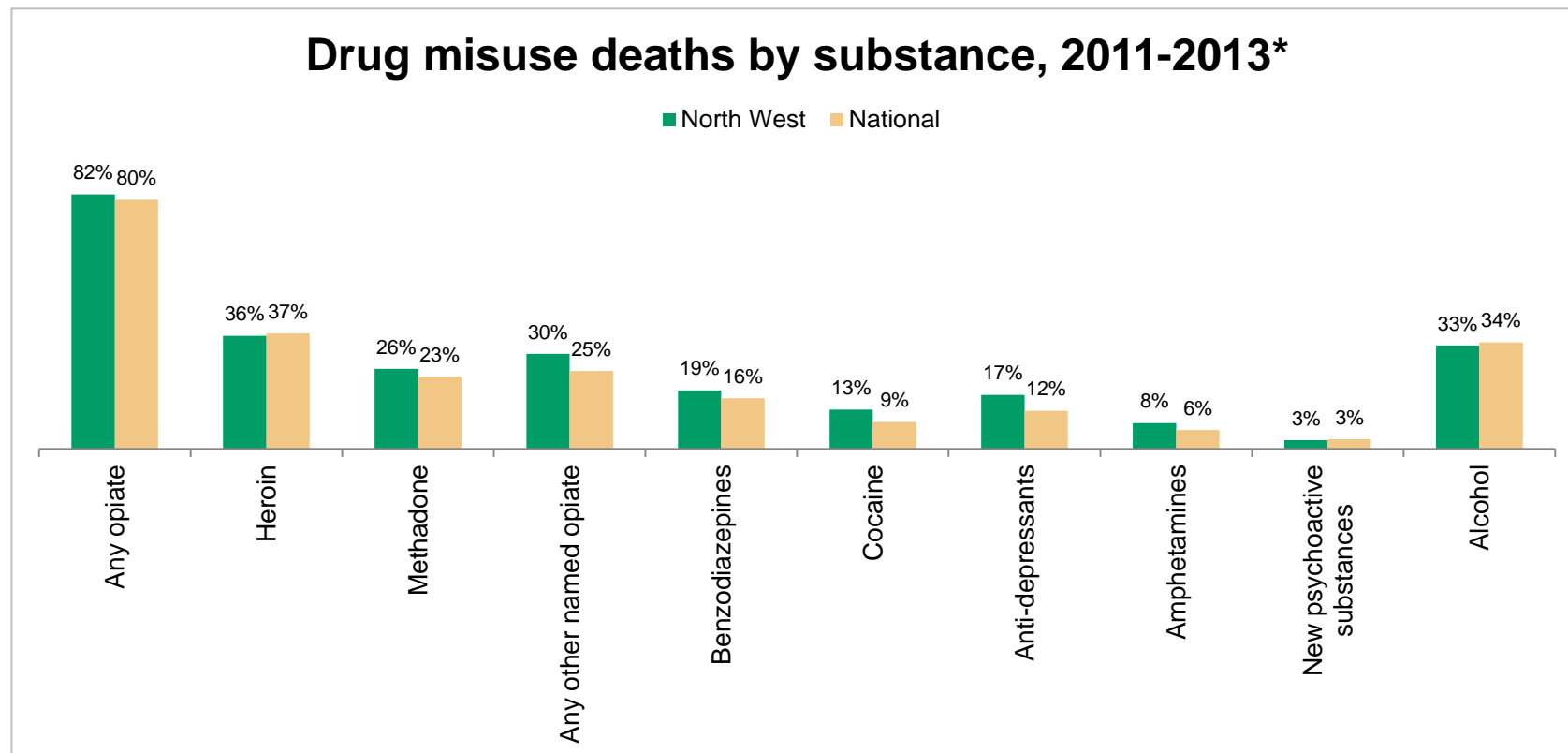


PHE analysis – national – poly substance

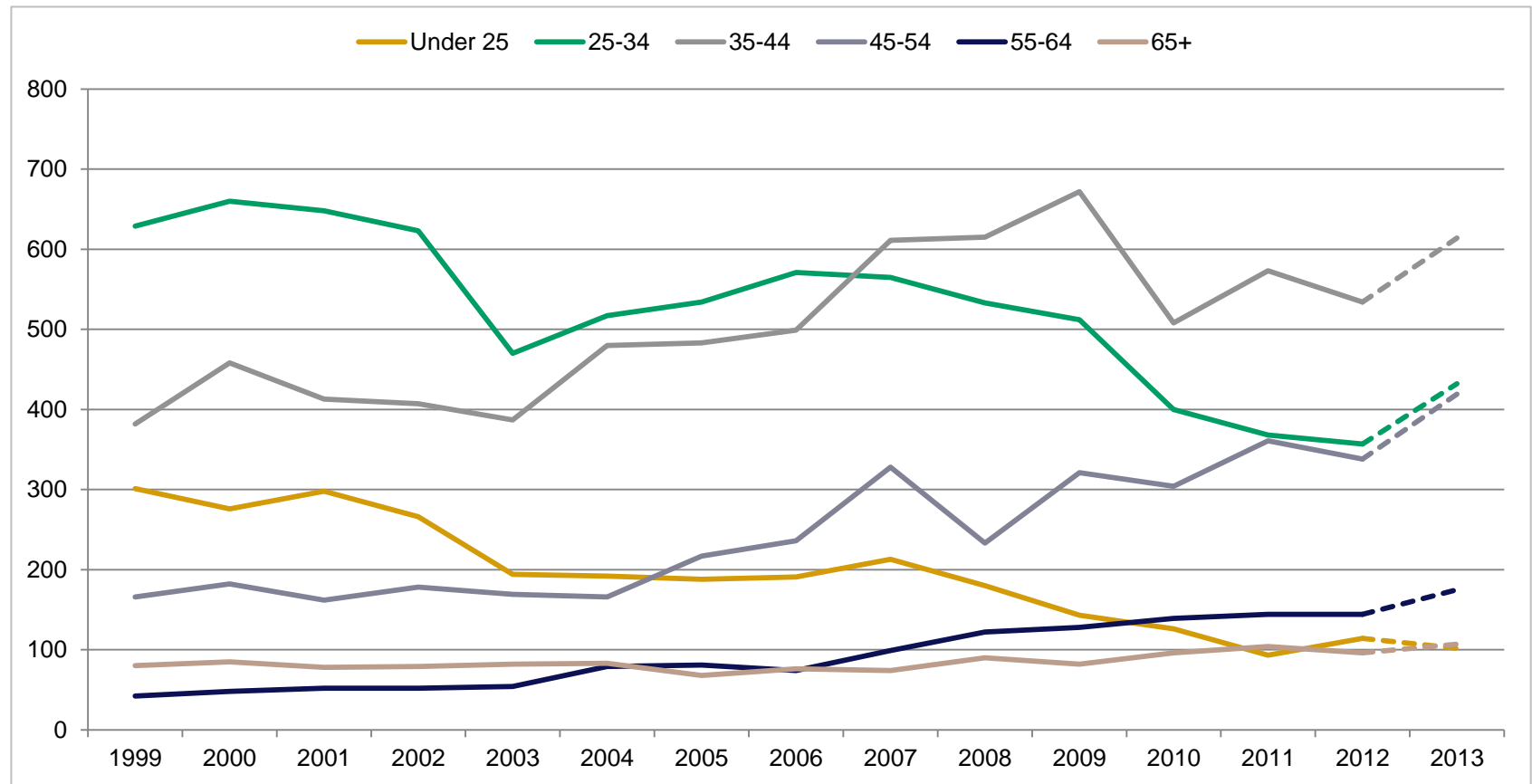


PHE analysis – regional – by substance

*Note: May be subject to slight change as some deaths have yet to be registered.

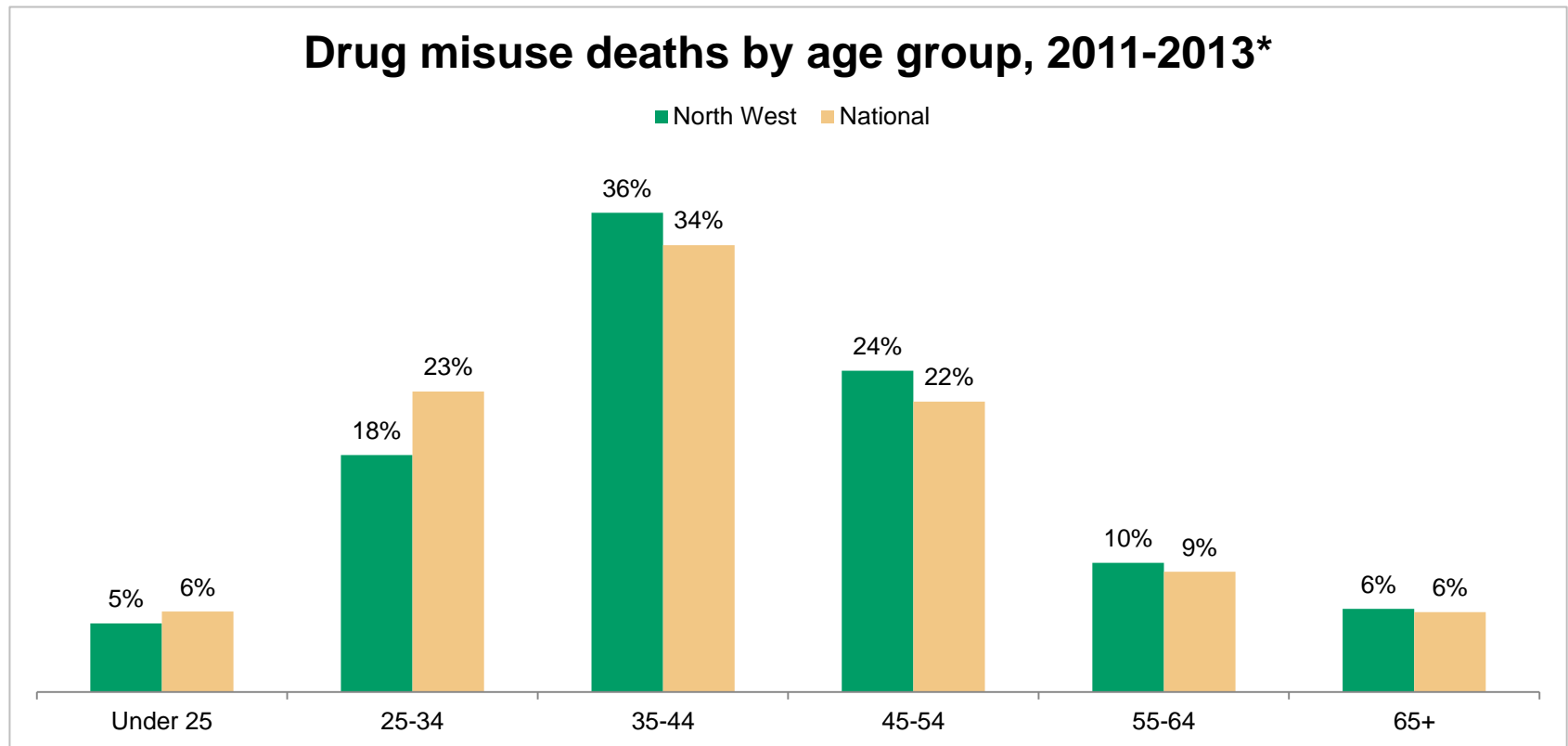


PHE analysis – national – by age

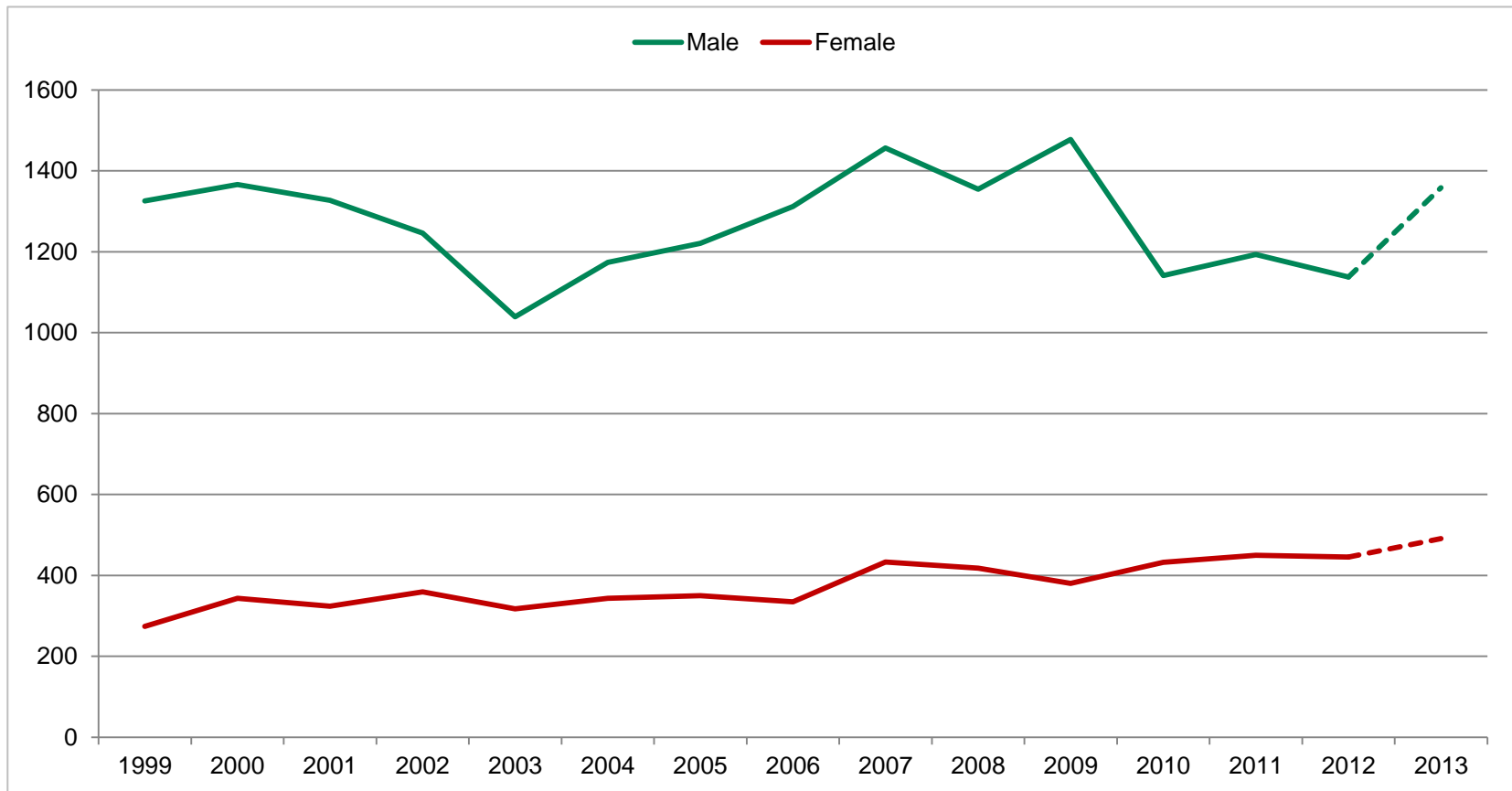


PHE analysis – regional – by age

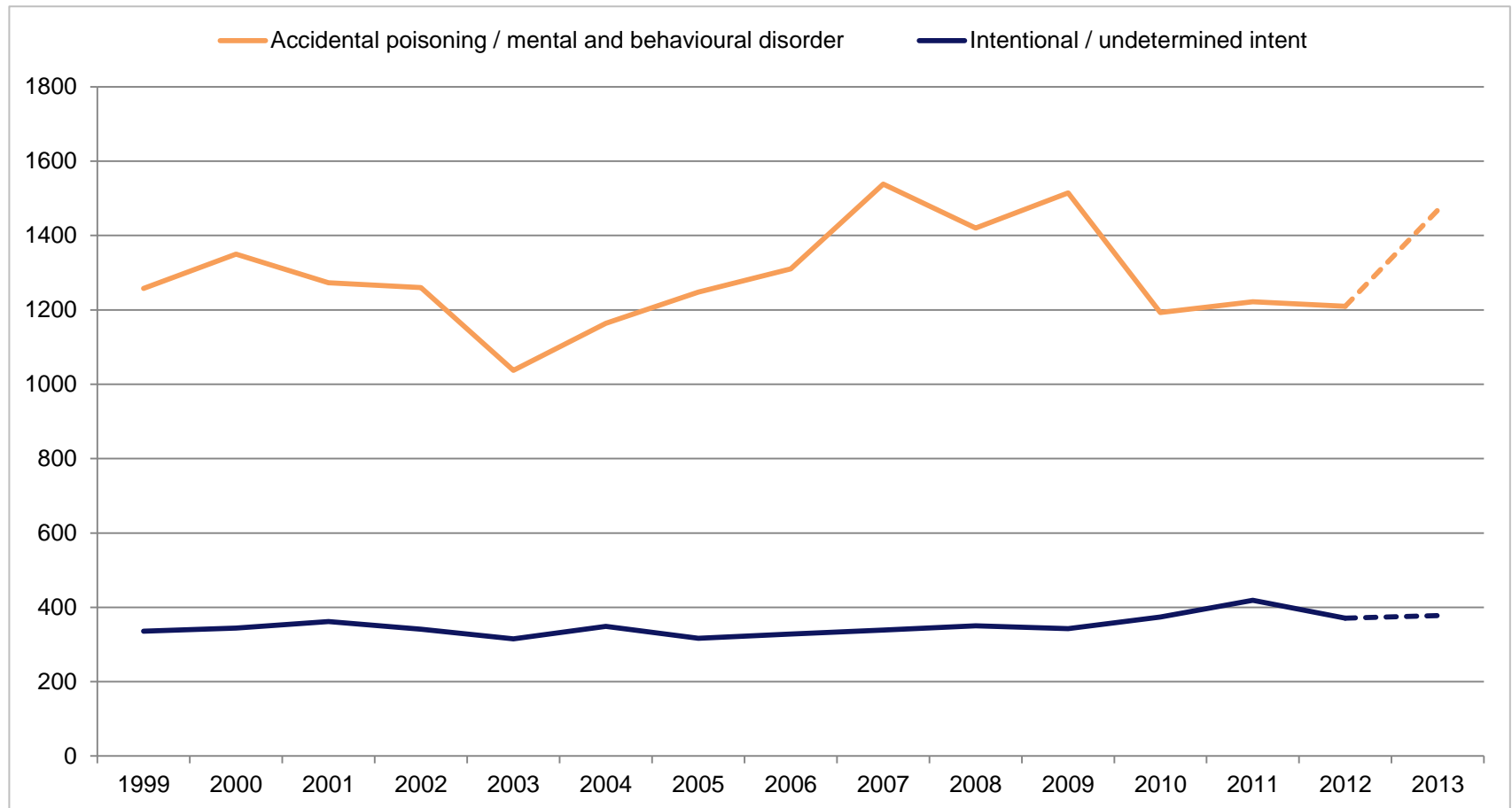
*Note: May be subject to slight change as some deaths have yet to be registered.



PHE analysis – national – by sex



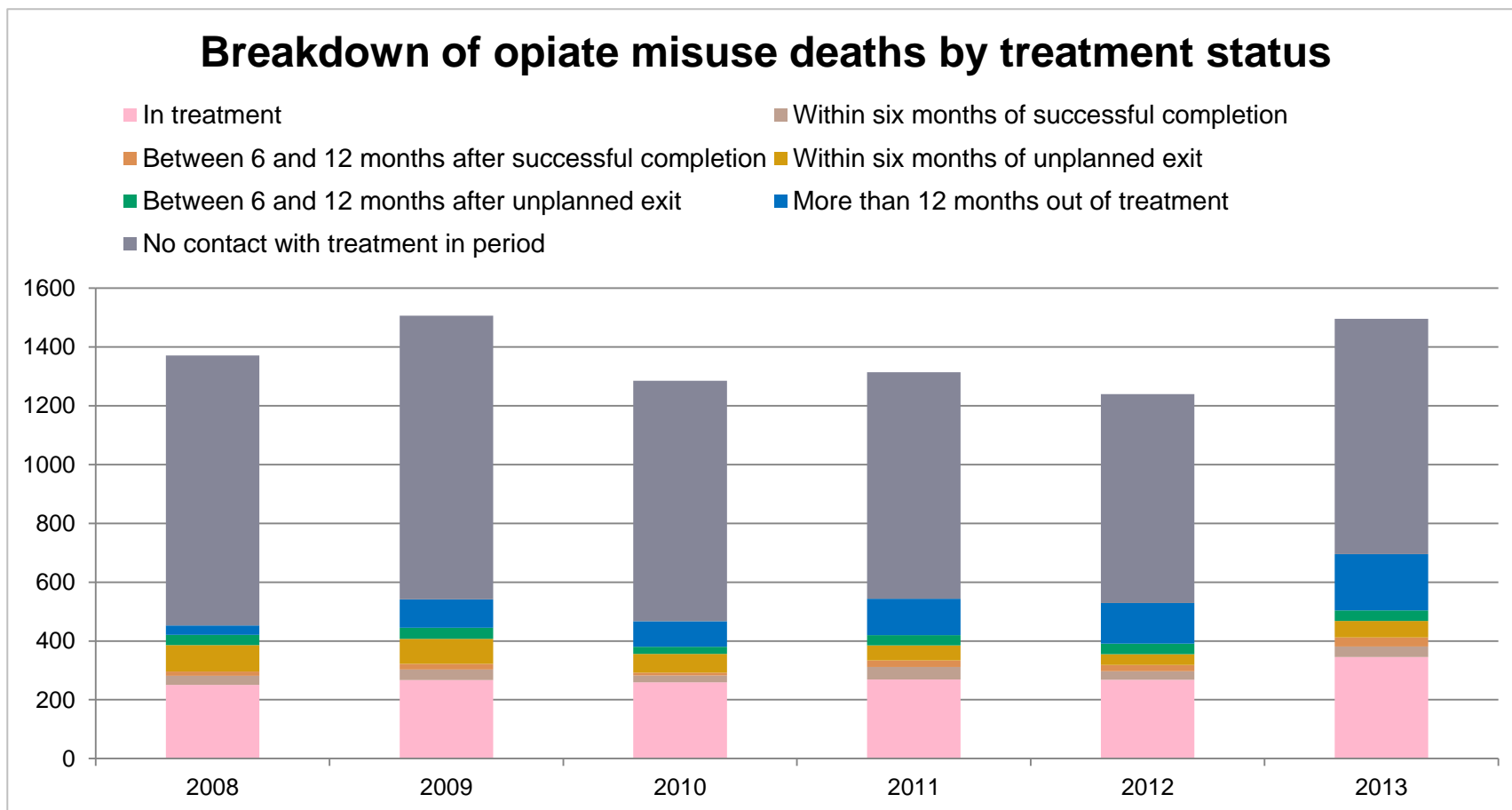
PHE analysis – national – by underlying cause of death



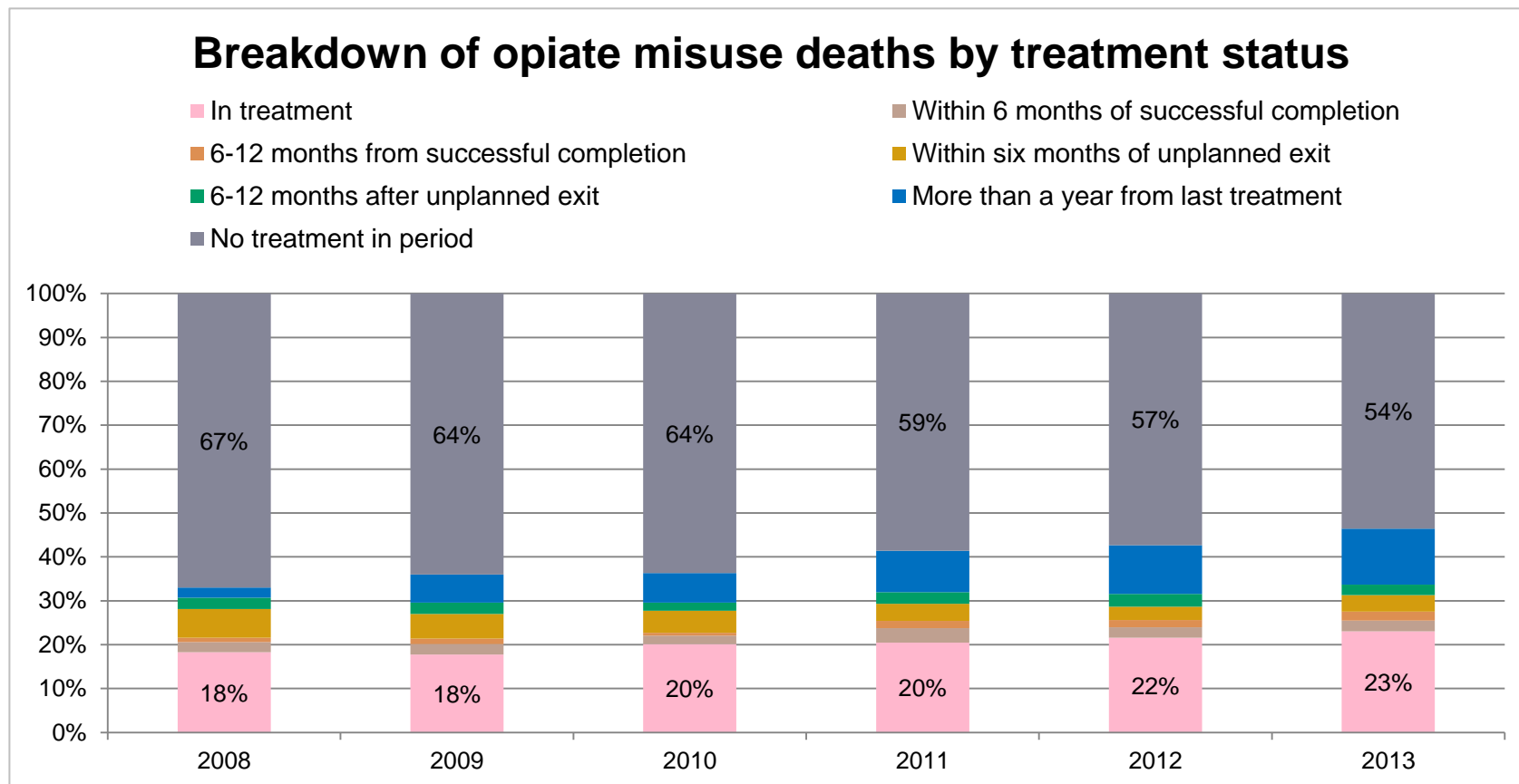
Match of drug poisoning data to NDTMS data

- Using an existing matching protocol, we were able to link opiate misuse deaths to NDTMS treatment data, covering the seven year period 2007-2013
- We then categorised opiate misuse deaths as follows:
 - In treatment
 - Within 6 months of successful completion
 - Between 6 and 12 months following a successful completion
 - Within 6 months of an unplanned exit from treatment
 - Between 6 and 12 months following an unplanned exit from treatment
 - More than 12 months from latest treatment contact
 - Never had treatment contact
- Analysis was reported for each year from 2008 to 2013, to allow for a 'run-up'

Match of drug poisoning data to NDTMS data



Match of drug poisoning data to NDTMS data



Match of drug poisoning data to NDTMS data

- The analysis demonstrated that up to 2012 there was:
 - Similar proportion over time where the person had recently been in treatment (defined as within past year)
 - Slight increase in the proportion in treatment when they died
 - The majority still had not been in treatment in the period studied (i.e. since at least 2006)
- By contrast, prevalence and treatment data suggest that the majority of opiate users have had recent treatment (see White et al, 2015* for a more detailed analysis)
- However, the 2013 increase was slightly more marked among those with recent treatment than those without
- *Full reference: White, M, Burton, R, Darke, S, Eastwood, B, Knight, J, Millar, T, Musto, V & Marsden, J (2015). Fatal opioid poisoning: a counterfactual model to estimate the preventive effect of treatment for opioid use disorder in England. *Addiction*, 110, 1321-1329.

Match of drug poisoning data to NDTMS data

- A low proportion (around 4%) had a successful completion in the past year – this has increased slightly over this period, although this is in the context of rising successful completion numbers
- Analysis captures community treatment only. Early indications from matching to prison treatment data over a limited time period seem to suggest around 6% had left prison treatment in the previous year, with 2% of the total having prison treatment without community treatment.



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Stakeholder perceptions of take-home naloxone within prisons

Arun Sondhi, Researcher, Therapeutic Solutions Ltd

Study Aims

- * Qualitative study aimed at understanding the barriers and challenges to implementation of take-home naloxone (THN) within a prison setting
- * Describing staff and prisoner perceptions
- * Suggesting possible enhancements to service delivery

Study Methods

- * Survey of prisoners receiving THN training (n=142)*
- * Discussions with staff (n=17) and prisoners (n=26)
- * Document analysis of local group meetings and performance data

Prisoner Survey

- * 54% experienced an opiate-related overdose
- * 79% overdose in presence of other drug users
- * 38% taken by ambulance to hospital
- * 73% witness someone else overdose

Prisoner Survey

- * 68% stated family/friends worried about prisoners overdosing on release
- * 81% stated no or limited knowledge of naloxone
- * High prisoner confidence following training in responding to a future OD episode
- * Follow-up training seen as important

Themes Identified

- * Negative and confused range of perceptions of THN amongst stakeholders
- * Difficulties with the identification and engagement of eligible prisoners
- * Prison processes key
- * Need senior staff engagement

Negative and confused range of perceptions

- * Name confusion (e.g. naltrexone)
- * Word-of-mouth influences (“instant rattle”)
- * Fear of police contact whilst in possession of a kit
- * Disconnect between harm reduction and abstinent objectives

Negative and confused range of perceptions

“Since I’ve come to this jail, everyone [has been] banging on about getting myself sorted and off the drugs....It’s taken a while and I’m in the right place to move forward for once, no more gear – nothing. I’m done with that life....I’m clean now with no intention of using, so why do I need this?”
[Male prisoner]

Identification and Engagement of Prisoners

- * Induction sub-optimal
- * No systematic way for tracking key segments of prisoners (“churn” issues)
- * Use of “clinics” to reinforce key messages
- * Leaflet drops limited value
- * Post-release period key

Identification and Engagement of Prisoners

“Training [is] good and I’m glad I have done it, a real eye opener a lot of stuff I didn’t know. I know a lot of the lads think that ‘cos they [are not] using in jail they don’t think they need it but that’s not the case on the out. Best to get them... when they hit the hostels and it’s [drugs] around them again when they might be tempted [to use].

[Male prisoner]

Realities of Distribution within Prison Settings

- * At the time of the study, distribution effected by Patient Group Directives
- * Staff fear use for illicit means (e.g. through use of the needle)
- * Prisons had different internal systems to place THN with prisoners (use of “props” or “vals”)

Possible Service Enhancements

Addressing Stakeholder Perceptions

- * Provide literature (Q&A) and discussions with prisoners to allay concerns

Identification and Engagement of Prisoners

- * Consider mandatory training for all opiate users
- * Integrate THN within life skills training

Possible Service Enhancements

Identification and Engagement of Prisoners

- * “Clinics” to reinforce knowledge
- * Consider MI to track prisoners within prison and with community services
- * Integrate THN within Routes to Recovery maps
- * Follow-up training post-release (e.g. hostels)

Possible Service Enhancements

Distribution of THN in Prison Settings

- * Process map final distribution point (e.g. props or vals)
- * Consider role for non-clinical teams including peers in the distribution chain
- * Ensure senior management buy-in and encourage wider staff awareness of THN

Thank You!

- * Paper published in Harm Reduction journal
www.harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-016-0094-1
- * Forthcoming short paper in Drug and Alcohol Today
- * Contact details: arun.sondhi@therapeutic-solutions.org.uk



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Tramspotting: Blackpool's story

Jacqueline Reynolds, Lead Nurse, Substance Misuse, Delphi Medical
Nicki Da Costa, Naloxone Trainer, Drugline Lancashire Ltd

Tramspotting – A Blackpool Perspective of Naloxone

Jackie Reynolds – Lead Nurse Delphi Medical

&

Nicki Da Costa – Lead Trainer Drugline Lancashire Ltd



Naloxone

- * **A Blackpool overview**
 - * **Myth or fact?**
- * **When to administer**
- * **How to administer**

Blackpool – An Overview

- * **Large injecting population**
- * **Poly drug and alcohol users**
- * **Drug using homeless cohort**
 - * **Transient population**

Where do we issue Naloxone?



Where do we issue Naloxone?



Where do we issue Naloxone?



Myth!

- * <https://www.youtube.com/watch?v=zv29rQayocM>
- * The full clip from Pulp Fiction is available on the following link:
 - * <https://youtu.be/jpMxpzfSRUA>

Fact!

* https://www.youtube.com/watch?v=_A_1groHxW8

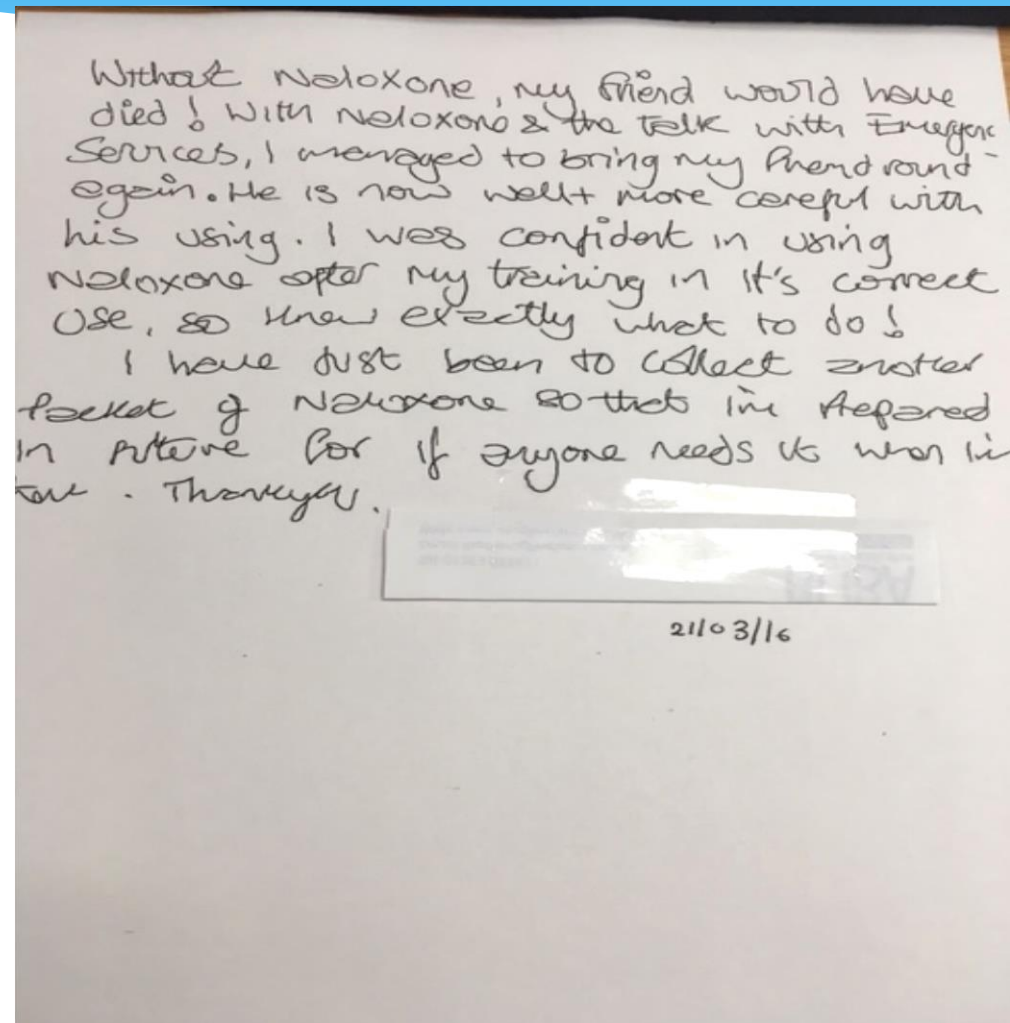
Fact

- * Can be issued anywhere
- * Easy to administer
- * Simple to train
- * Can be used by anyone

The story so far.....

- * Since May 2015 we have issued approximately 380 Naloxone kits
- * 8 reported uses – although we suspect this figure will be higher

A thank you



And another ...

my name is [REDACTED]
I was issued A naloxone injection pen
at Horizon on Cookson Street Blackpool
at the info session

after 4 days of being issued with
naloxone one of my friends
overdosed on Heroin of which I lost
my mind back to what I was
taught at the info session

I was petrified and used ~~the~~
one dose of the naloxone and
after about 2 minutes my friend
came back around

it was a very useful thing to
have on me as it saved my friend's
life.

I recommend that naloxone should
be issued as it's a life saver.

[REDACTED]

8/9/15.11

Thank you!

* ndacosta@druglinelancs.co.uk

* jacqueline.reynolds@delphimedical.co.uk



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The complex question of drug related deaths. No simple answer

Liz McCoy, Directorate Manager, Drugs and Alcohol, Pennine Care NHS Foundation Trust

Background

- Spike in drug related deaths
 - Unclear picture as to cause
 - Some ideological positions being adopted
 - Emerging picture in operational services noted by front line staff and managers.
- 

Initial Study-Lines of Enquiry

- Analyse of all Pennine Care footprint deaths for 2013 undertaken
- Examination of :
 - Incident reports
 - Coroners reports
 - Case files
- 33 cases examined-21 identified as primary drug clients
- Wide variety of possible variables considered (27)

Findings – Lines of Enquiry Study

What we didn't find.....

- Is it alcohol?
 - 50% were not alcohol users
- Is it age?
 - Youngest 28 years , oldest 57. Most 30's and 40's.
- Is it service transfer/disruption?
 - No increase before or after service transfer (both in and out of service)
- Is it liberal prescribing?
 - Wide range of prescribing interventions, some not prescribed
- Is it abstinence focused regimes?
 - No time limited treatment, no compulsory detox

So, who is it?

- Multiple and complex needs-mental health, personal vulnerability, self neglect,
- Hard to engage and sometimes chaotic
- Well known to services- easily recognised even from ‘anonymised’ information

and,

significantly...

Compromised physical health


(Causal, contributory and present)



Extended Study

- Examined all drug related deaths across the Trust for the last 5 years (up until August 2015)
- Identified 199 drug deaths (further 103 alcohol deaths)
- Focused examination of:
 - Causes of death
 - Circumstances at or immediately prior to death

Grouped into 6 broad categories to make complex data manageable (by themes).



Extended study- Initial Findings

- Overdoses or possible overdoses

10 %

- Accidents (Inc RTAs etc.)

6%

- Suicides

6%

(12 in all of which 10 were hangings- 5 of them in a 4 month period)

- Homicides

1% (n2)

Extended Study – Initial Findings

- Unclear Cause of Death

28%

Including....

Found under a Bridge, open verdicts, misadventure (not stated as overdose) , transferred out clients, found by the police and CoD not provided to Trust by GP or coroner.

Need to obtain further information to establish outcome.

Likely to be a combination of other fields.



Extended Study- Initial Findings

- Physical Health (as sole, main or most significant issue)


48%

Includes :-

Expected deaths, Died in hospital, died at home, died in public places, taken into hospital as emergency admission.

Extended Study- Initial Findings

Physical Health- Main Causes

- Any respiratory and circulatory (single cause) 28.5%
 - Any GI (inc alcohol indicators) 21%
 - Any Cancer 12.5%
 - Multiple Factors 38%
- 

Extended Study-Initial Findings

Multiple Factors

Including:

Multiple organ failure

Brain cyst

Cardiac with other factors

HIV

‘Chronic Illness’

COPD and Hep C

Etc.....



Extended Study- Initial Findings

- **Physical Health**
 - Undefined and unidentified
 - Unmanaged (by client and professionals)
 - Self neglect and ‘careless’ with health
 - Multiple and complex presenting issues

Next Steps

- Re-examine existing information including by independent peers
- Examine case notes for Extended Study
- Obtain missing and additional data (GP/ Coroner)
- Undertake full academic study (possibly using variables from pilot)


Develop service response



Health Warning

- Not an academic study (but have tried hard to keep data clean)
- Some judgement and subjectivity due to complex and imprecise nature of source information
- Has not been peer reviewed

However

- Has 'real world' validity- (ask your front line staff)
 - Provides good basis for service responses
 - Trend seems to be continuing- 5 recent physical health deaths.
- 

Thank You.





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Seasonal influenza vaccination: A pilot programme aimed at improving uptake in drug users

Sally Morrison-Griffiths, Associate Medical Director, Addaction

Background

People who use drugs may be at higher risk of developing complications of influenza due to a number of reasons:

- ▣ Ageing cohort
- ▣ Diagnosed & undiagnosed chronic conditions
- ▣ Poor nutrition and general health neglect
- ▣ Homelessness, unemployment and poverty
- ▣ Some may be less likely to visit GP

Background 2

- ▣ Concern about deaths among service users from bronchopneumonia
- ▣ Addaction St Helens were approached by NHS England, Merseyside Area Team & PHE
- ▣ 'Out of Practice' Service Specification

Care Pathway

addaction

- ▣ Seasonal Influenza Immunisation Programme Outside General Practice
- ▣ To improve access to the seasonal influenza vaccine
- ▣ A clear, robust clinical pathway
- ▣ 1st October 2014 – 31st March 2015
- ▣ Review date 1st April 2015

Substance Misuse in St Helens

- ▣ Population = 176,000
- ▣ Addaction is the sole provider of alcohol and drug services in St Helens
- ▣ Over 500 individuals on a prescription for methadone or buprenorphine

Chronic Diseases in Drug Users

February 2014

- ▣ 503 service users on an opioid substitution therapy (OST) prescription
- ▣ Audit of 185 casenotes (37%)
- ▣ 97 individuals (52%) diagnosed with one or more long-term conditions on the GP summary

Implementation

addaction

- ▣ A number of meetings
- ▣ A Patient Group Direction (PGD)
- ▣ Signed up to the service
- ▣ Leaflets and posters
- ▣ Confirmation of cold chain
- ▣ Training update for nurses & doctors
- ▣ An evaluation at the end of pilot scheme
- ▣ First vaccinations 28th October 2014

Pilot Programme

28th October 2015 – 31st March 2016

- ▣ Opiate users on a script = 515
- ▣ Offered = 340 (66%)
- ▣ Declined = 106 (31%)
- ▣ Already had = 29 (9%)
- ▣ Accepted = 205 (60%)

Chronic Disease

addaction

Chronic Disease	Number
Liver	54
Respiratory	50 (COPD = 26 Asthma = 24)
Ischaemic Heart Disease	4
Kidney Disease	2
Cancer	2
Type I DM	1
Stroke	1
HIV	1
Other	95

Service User Feedback

- ▣ April 2015
- ▣ 60 questionnaires
- ▣ 51 respondents
- ▣ For the question “Do you think it is a positive thing that Addaction offered the flu jab?”
- ▣ 44 (86%) = yes
- ▣ 6 (12%) = not sure
- ▣ 1 (2%) = no

Summary

Seasonal Influenza Vaccination can be safely and effectively administered outside General Practice to improve uptake in a population of high morbidity, high mortality and high deprivation index.

sally.morrison@addaction.org.uk



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A review into drug-related deaths in Cumbria

Paul Musgrave, Senior Manager, Cumbria County Council

Drug Poisoning Deaths

Defined by the Office of National Statistics according to a set of international classification of disease codes. This is an overarching category including deaths caused by over-the-counter, prescription and illicit drugs. Drug misuse deaths are a subset of drug poisoning deaths.

Overview

- The rate of drug poisoning mortality in Cumbria increased between 2008-10 and 2012-14 from 5.3 to 7.7 deaths per 100 000 population (not a significant increase).
- Carlisle has the highest rate of death related to drug poisoning.
- There is an increasing trend of drug poisoning mortality in North Cumbria.
- In 2014, 74% of drug poisoning deaths were related to drug misuse, and during the review period of 2012-2014 64% of drug poisoning deaths were due to drug misuse.

Socio demographic profile

- Carlisle had a significantly higher rate of drug poisoning mortality in 2012-14 compared to other areas and Cumbria as a whole.
- Those who died as a result of drug poisoning were predominantly male (on average 70%).
- There is a clear association with deprivation; those living in the most deprived communities have a significantly higher rate of drug poisoning mortality.
- On average 1,097 potential years of life were lost (PYLL) each year.

Profile continued

- The average age of death was 41 years.
- Male drug poisoning mortality peaked in the 35-44 age range.
- Female drug poisoning mortality peaked in the 25-34 age range,.
- Leaving school at age 16 or before, being unemployed, single, and living alone were common characteristics among those who died.
- 56% of those who died had at least one child and as a result 109 children lost a biological parent due to a drug poisoning death between 2012 and 2014

Significant life events

- 6% of those who died had previously been a looked after child.
- 20% had experienced childhood abuse (emotional, physical, or sexual).
- 11% had been a victim of domestic abuse (all were female).
- 26% had attempted suicide in the past; females were more likely than males to have attempted suicide.

Coroner verdicts

- For 26% of deaths a verdict of ‘misadventure’ was delivered.
- 20% had a narrative verdict.
- 16% had a verdict of either ‘suicide’, or an ‘open’ verdict.
- A verdict of ‘abuse of drugs’ was more likely to be delivered in South and East Cumbria.
- A verdict of ‘drug related’ was more likely to be delivered in North and West Cumbria.

Toxicology

- Toxicology data was viewed for 40 deaths (41% of the sample).
- Antidepressants were the most common drug present at the time of death (53%) and implicated in death (30%).
- Diazepam was the second most common drug present at the time of death (48%) and implicated in death (23%).
- Diazepam and alcohol was the most common combination of illicit drugs present at the time of death (13%).
- Alcohol was found in the system at the time of death in 48% of cases with toxicology data; the average blood alcohol level was 153 mg/ml (i.e. almost 2 times the UK level driving limit of 80 mg/ml).

Drug use history

- 61% of individuals were known to have been a drug user at some point in their life (75% of males and 30% of females).
- Of the known drug users, 63% used heroin, 53% had alcohol problems, and 17% abused benzodiazepines.
- Of the known drug users, 75% were poly drug users and 38% had used drugs intravenously.
- The average age of first illicit drug use was 15 years.
- The average age of first alcohol use was 14 years.
- Of the 98 drug poisoning deaths, 48% were known to have experienced a previous non-fatal overdose.

Medical conditions

- 77% had at least one mental health diagnosis, most commonly depression (54%).
- 18% had a dual diagnosis.
- 62% had at least one physical health condition, most commonly diseases of the nervous system (25%).
- 16% had chronic pain.
- 9% had a diagnosis of hepatitis C.

Contact with services

- 78% of individuals were known to the police through their intelligence system.
- 60% were seen in custody in the last 6 years, 37% in the 12 months before death.
- 34% were known to have spent time previously in prison at some point in their life.
- 79% had seen their GP in the year prior to their death, with 54% of these consulting at least in part for either a mental health or drug related problem. 47% saw their GP in the month before they died and 20% saw their GP in the last week of their life.
- 56% had some contact with specialist mental health services in their lifetime, 34% had contact in the 12 months before death and 10% had contact in the week before death.
- 18% were active clients with specialist mental health services at the time of death.

Contact with services

- Overall 37% were known to have had some contact with substance misuse recovery services in Cumbria in their lifetime. This is in the context of 64% of the deaths in the sample being ascribed to drug misuse, as well as 61% of those who died having been known to be a drug user at some point in their lives.
- Of those in contact with drug services, 5 (18%) were seen in the last week of their life. Of the total number who died 22% were seen in the 12 months before death by drug services, with 5% being seen in the week before death.
- Of the 13 individuals who were active with substance misuse recovery services at the time of death, 10 were prescribed a substitute drug when they died.

Methadone and heroin/morphine related deaths

- Of the 98 drug poisoning deaths, 21% were methadone related.
- Over the last 7 years, methadone related deaths in Cumbria have on the whole followed an increasing trend.
- For methadone related deaths the average age was 36 years and the highest proportion lived in Barrow
- Of the 21 people who died as a result of a methadone related death, only 6 (29%) were receiving a methadone prescription at the time of death.
- Of the 98 drug poisoning deaths, 17% were heroin/morphine related, and of these only 12% were on a substitute prescription at the time of death.
- The trend of heroin/morphine related deaths over the last 7 years has been sporadic.
- The average age for heroin/morphine related death was 42 years and the highest proportion lived in Carlisle