



Public Health
England

Tramadol deaths in the United Kingdom

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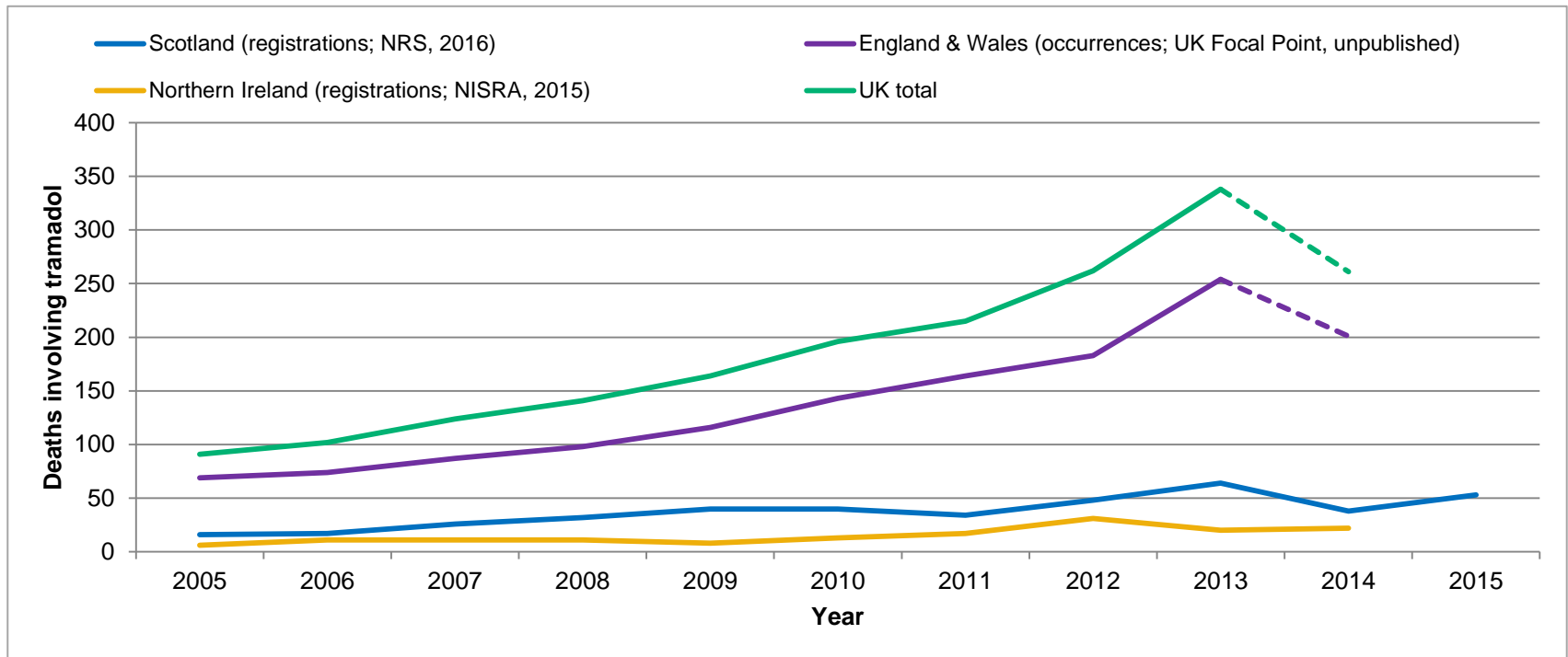
Data collection and reporting

- Drug-related deaths data are collected through three General Mortality Registers (GMRs) – England & Wales, Scotland and Northern Ireland.
- Reported by EMCDDA Selection B and two national definitions: ‘drug misuse’ definition and the much broader ‘drug poisoning’ definition. Tramadol is now included under ‘drug misuse’ definition, although there is some question over how many of these genuinely involve misuse.
- National definitions can identify tramadol deaths specifically as well as other substances involved in those deaths, though Scotland reports implication whereas rest of the UK reports on mentions of substances
- EMCDDA definition does not identify tramadol directly as ICD-10 injury codes not specific enough, but can be cross-referenced with the national definitions



Tramadol deaths by country in the UK

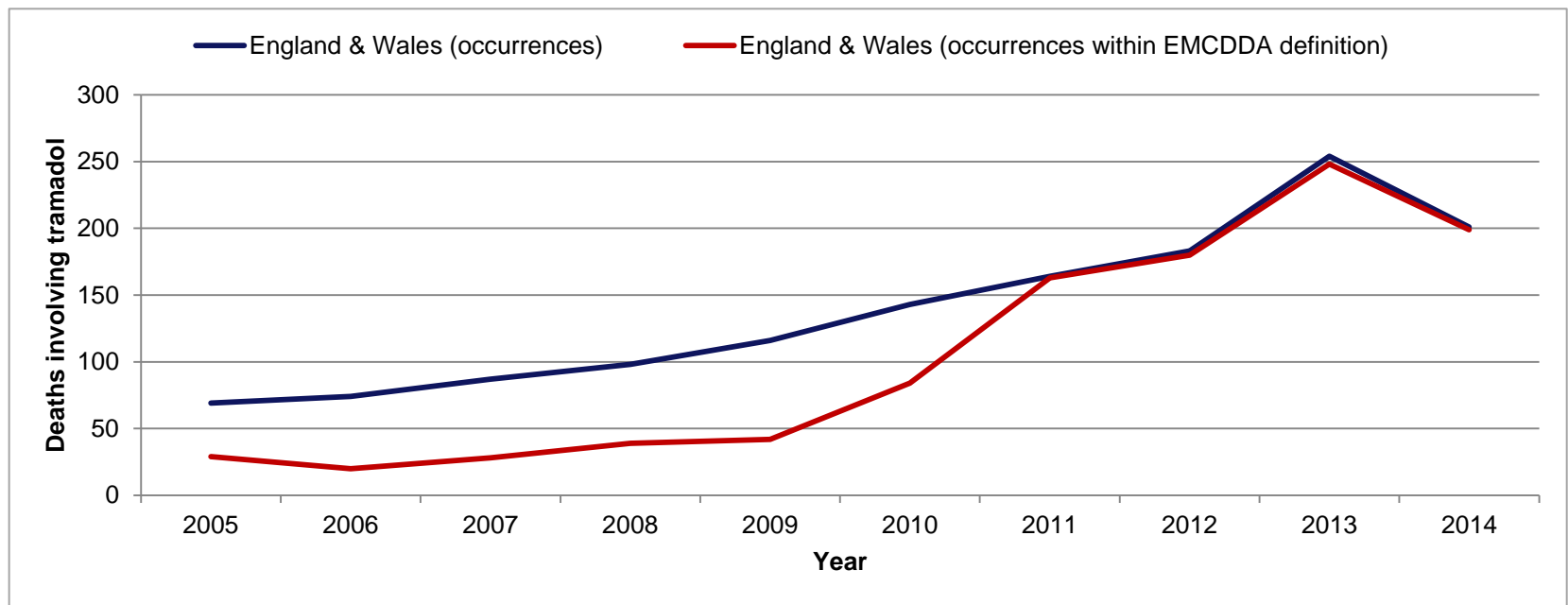
Note: The UK Focal Point recently revised its reporting under Selection B so that England & Wales figures are reported by year of occurrence rather than year of registration





Effect of change in ICD-10 coding for tramadol

Tramadol was moved from a T39 code to T40 code during an ICD-10 update in 2011; prior to this many tramadol deaths in England & Wales fell outside Selection B. (Data not currently available for Scotland and Northern Ireland but likely to be similar.)





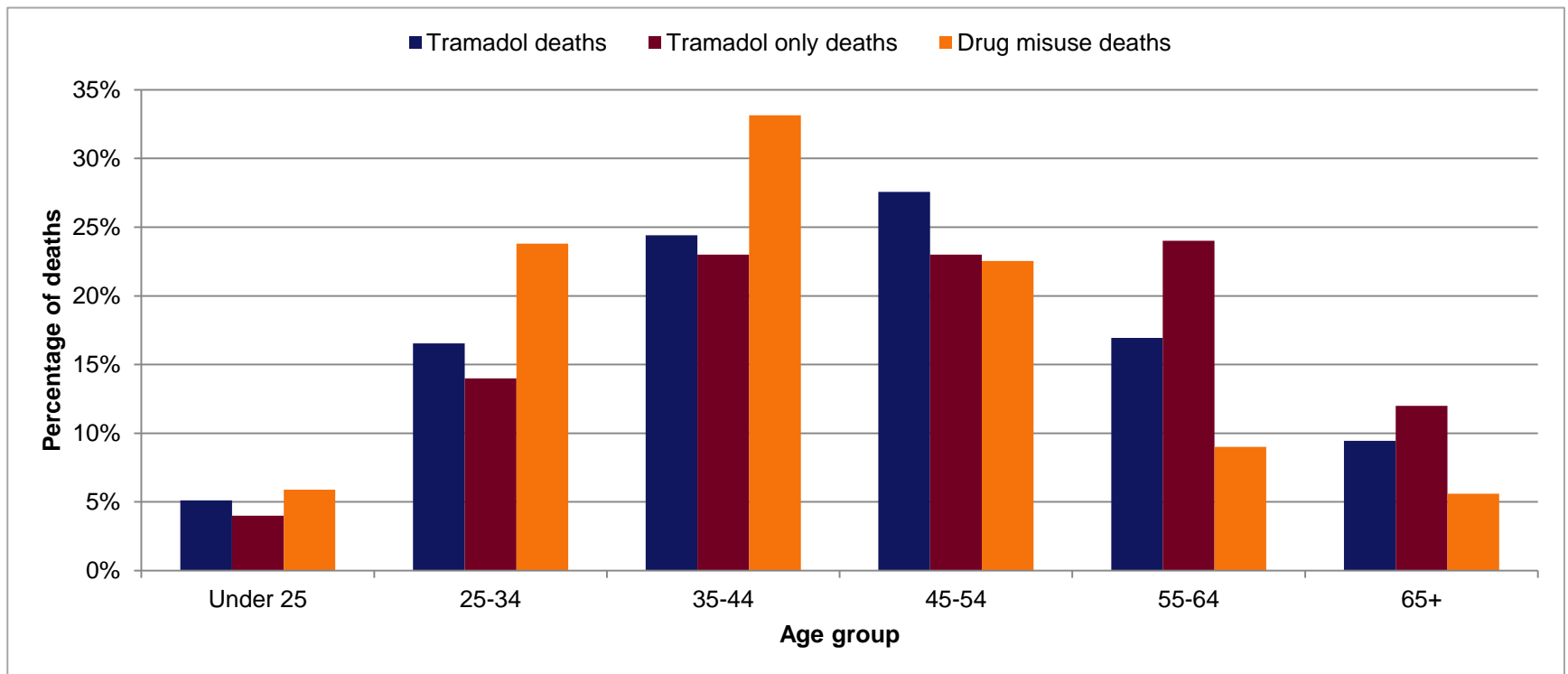
Profile of tramadol deaths in England and Wales

- Overall, tramadol was mentioned in 12% of drug misuse deaths in England and Wales in 2013; third most common opioid behind heroin/morphine (41%) and methadone (19%)
- Of the 254 tramadol deaths in England and Wales in 2013, tramadol was the only drug mentioned in 100 (39%) deaths, although 23 of these also mentioned alcohol
- The most common other drugs mentioned were other opioids (n=102, 40%), within which the most common were heroin/morphine (n=49, 19%), codeine (n=29, 11%) and methadone (n=24, 9%)
- Of non-opioid drugs, anti-depressants were most common (n=57, 22%; amitriptyline n=29, 11%), followed by benzodiazepines (n=36, 14%; diazepam n=23, 9%)
- Alcohol was more commonly mentioned alongside tramadol than any individual drug (n=61, 24%)
- Broadly, this profile has remained similar over recent years, though there is some fluctuation; 2014 data so far does not suggest a major change in the drug profile



Age of tramadol deaths in England and Wales

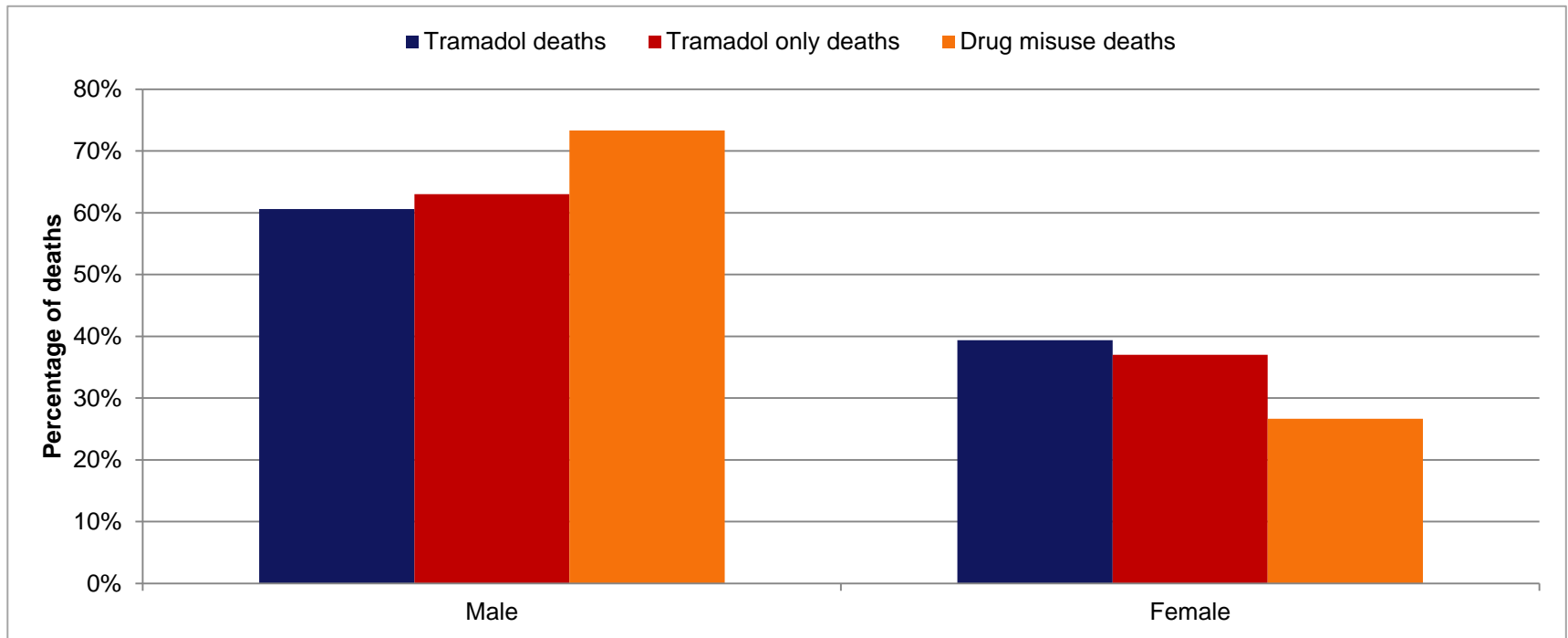
Tramadol deaths show an older age profile than most drug misuse deaths— median age at death of 46 in 2013 – 49 for tramadol only – compared to 41 for drug misuse deaths





Sex of tramadol deaths in England and Wales

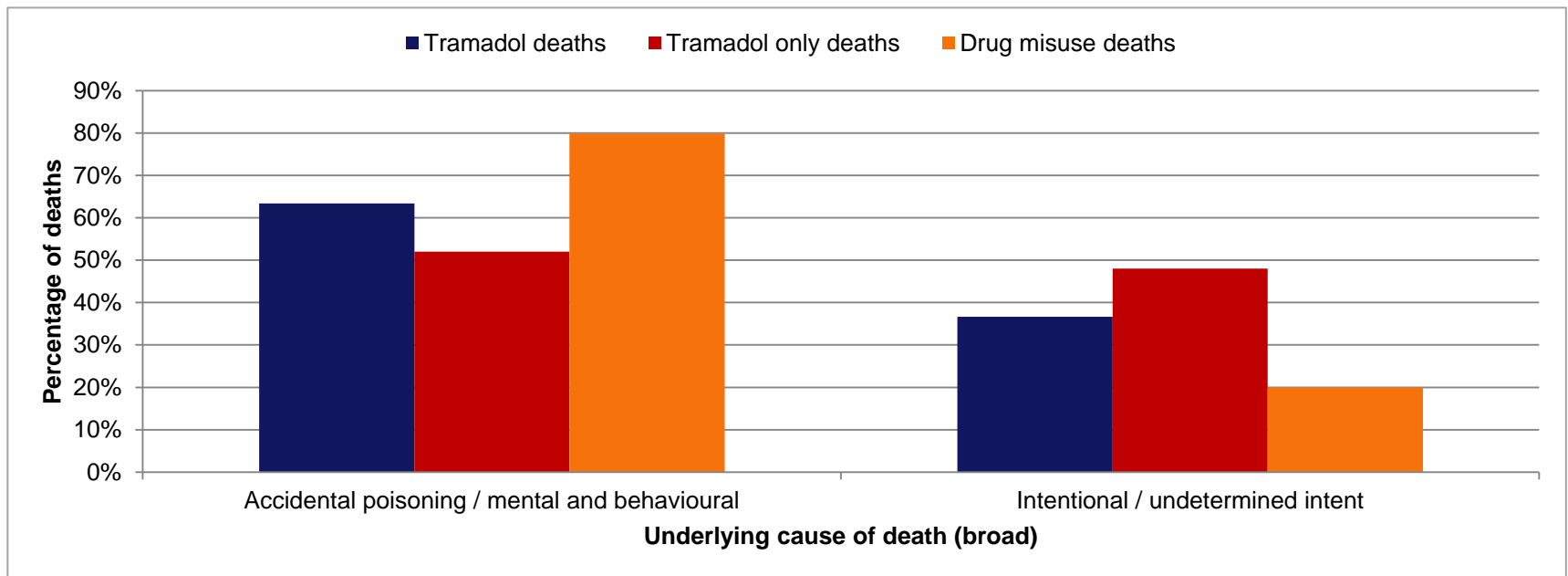
Women are over-represented in tramadol deaths – 39% compared to 27% overall. 18% of drug misuse deaths among women involve tramadol compared to 10% of men





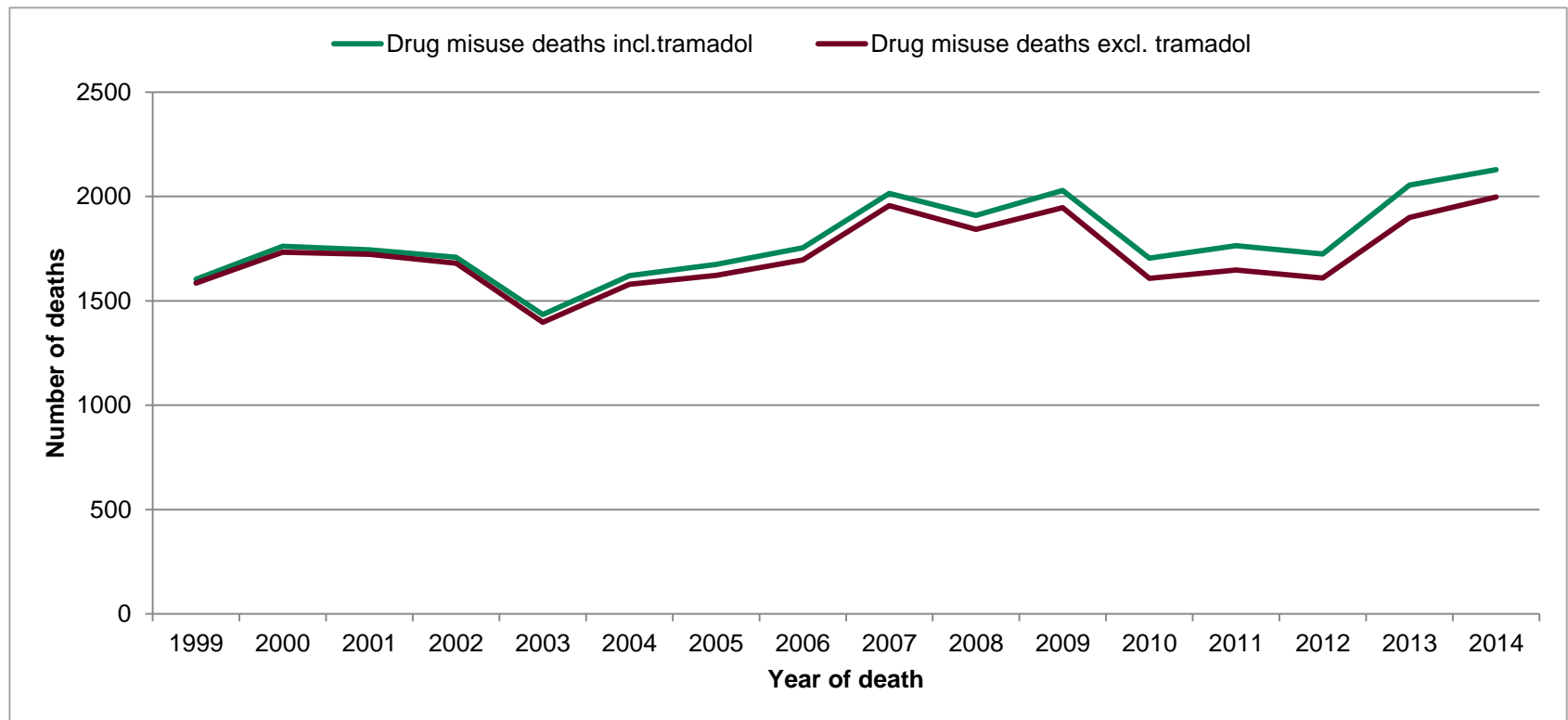
Cause of death among tramadol deaths in England and Wales

A higher proportion of tramadol deaths in 2013 were suicides compared to drug misuse deaths (37% vs. 20%) and suicides accounted for half of tramadol only deaths (48%)





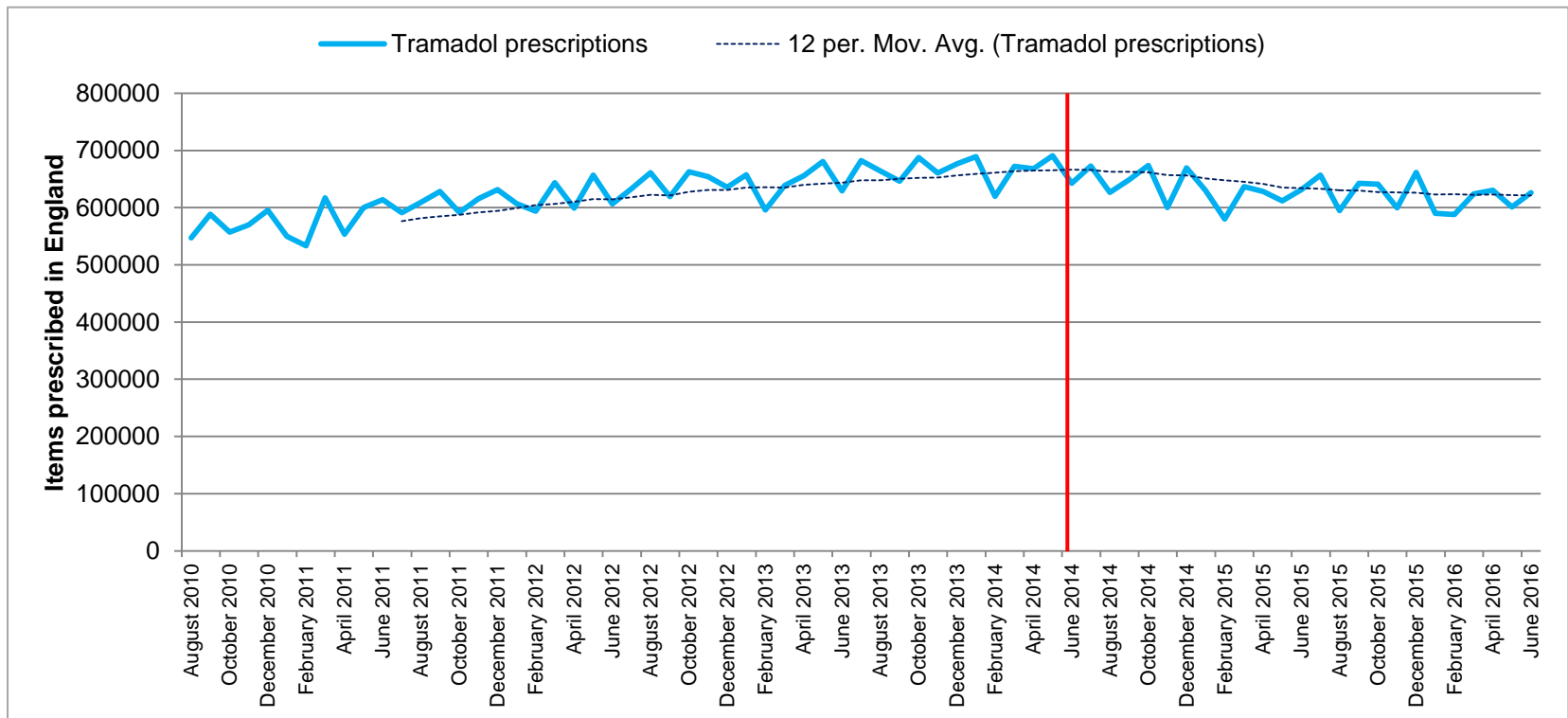
Impact of inclusion of tramadol within 'drug misuse' definition in England and Wales





Control of tramadol and prescribing in England

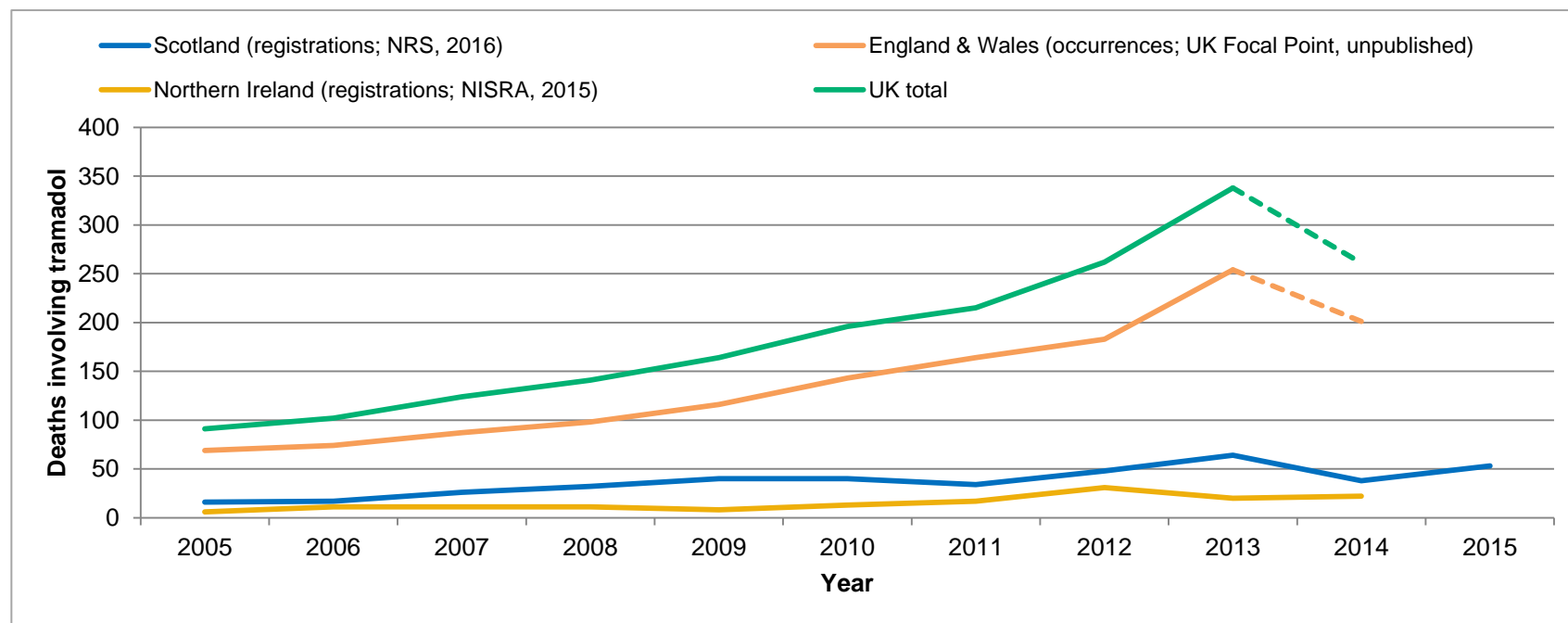
Tramadol became a Schedule 3 controlled drug under the Misuse of Drugs Act across the UK from June 2014. Prescribing in England has fallen slightly after this change:





Control of tramadol and tramadol deaths

Tramadol deaths fell in 2014 following a long term rising trend, which indicates that this change may have had a positive effect. However, there has not yet been a full year of mortality data after the change, and Scotland saw a rise in 2015 following a fall in 2014.





Summary

- There is a long-term trend of increased tramadol deaths in the UK; now third most common opioid in deaths in England & Wales and Scotland (behind heroin and methadone) and most common in Northern Ireland
- The majority of tramadol deaths involve other substances, and they are more likely to be older, to be female and/or to be suicides compared to drug misuse deaths overall
- The control of tramadol has led to reduced prescribing and a fall in 2014 after the very consistent rising trend suggests this may have resulted in a reduction in deaths involving tramadol
- However, we do not yet have even a full year of data for tramadol deaths in the UK data after this change and so cannot yet fully evaluate its effect