

# Problem benzodiazepine use in Ireland



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# Background

- one of the most commonly prescribed medications
- risk of dependence when used for long periods
- amplify depressant effects of other drugs
- 11% reported use of sedatives or tranquillisers (*NACD, 2006/7*)





# Data sources

- National Drug Treatment Reporting System  
treated benzodiazepine problem use (2003-2008)
- National Drug-Related Deaths Index  
poisoning deaths where a benzodiazepine was implicated (1998-2007)





# National Drug Treatment Reporting System (NDTRS)

- epidemiological database on treated drug and alcohol misuse in Ireland
- established in 1990
- socio-demographics, problem substance use, risk behaviour, type of treatment provided





# National Drug-Related Deaths Index (NDRDI)

- epidemiological database on drug- and alcohol-related deaths in Ireland
- established in 2005
- several data sources
- socio-demographics, toxicology, cause of death, risk factors



# Benzodiazepine cases entering treatment

	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
<b>All cases</b>	1054	1026	1115	1222	1225	1719
Benzodiazepine as a <b>main</b> problem	76 (7.2)	103 (10.0)	75 (6.7)	96 (7.9)	163 (13.3)	167 (9.7)
Benzodiazepine as an <b>additional</b> problem	982 (93.2)	928 (90.4)	1044 (93.6)	1129 (92.4)	1064 (86.9)	1562 (90.9)

NDTRS, 2003-2008





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NDTRS, 2003-2008



# Benzodiazepine cases entering treatment, by treatment status

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	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
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New cases	214 (20.3)	231 (22.5)	275 (24.7)	352 (28.8)	415 (33.9)	576 (33.5)
Previously treated cases	816 (77.4)	758 (73.8)	810 (72.6)	839 (68.7)	787 (64.2)	1113 (64.7)
Treatment status unknown	24	37	30	31	23	30

NDTRS, 2003-2008



# Benzodiazepine cases entering treatment, by treatment status

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**NDTRS, 2003-2008**





# benzodiazepine as a **main** problem substance

- 10% of all benzodiazepine cases
  - 48% of those are new cases

NDTRS, 2003-2008



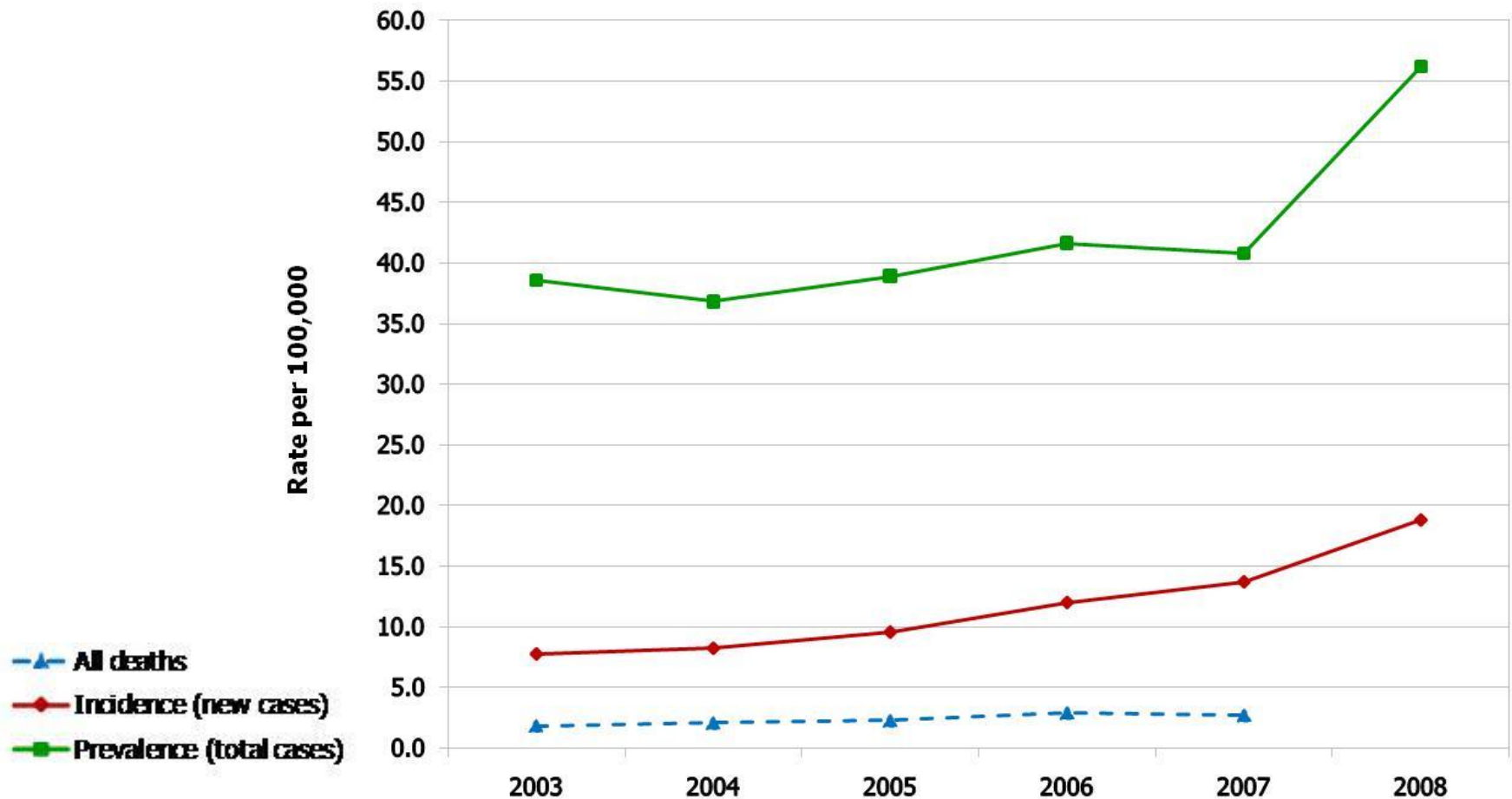
# Poisoning deaths where a benzodiazepine was implicated

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
<b>Total poisonings (n = 2,120)</b>	<b>178</b>	<b>187</b>	<b>182</b>	<b>178</b>	<b>211</b>	<b>185</b>	<b>207</b>	<b>248</b>	<b>270</b>	<b>274</b>
<b>Benzodiazepines (n = 649)</b>	<b>65 (36.5)</b>	<b>56 (29.9)</b>	<b>61 (33.5)</b>	<b>47 (26.4)</b>	<b>61 (28.9)</b>	<b>54 (29.2)</b>	<b>63 (30.4)</b>	<b>66 (26.6)</b>	<b>88 (32.6)</b>	<b>88 (32.1)</b>

NDRDI, 1998-2007



# Incidence and prevalence of treated cases and rate of death





# Average annual incidence of cases treated for benzodiazepine as their main problem substance per 100,000 of the 15–64-year-old population, by regional drugs task force area of residence

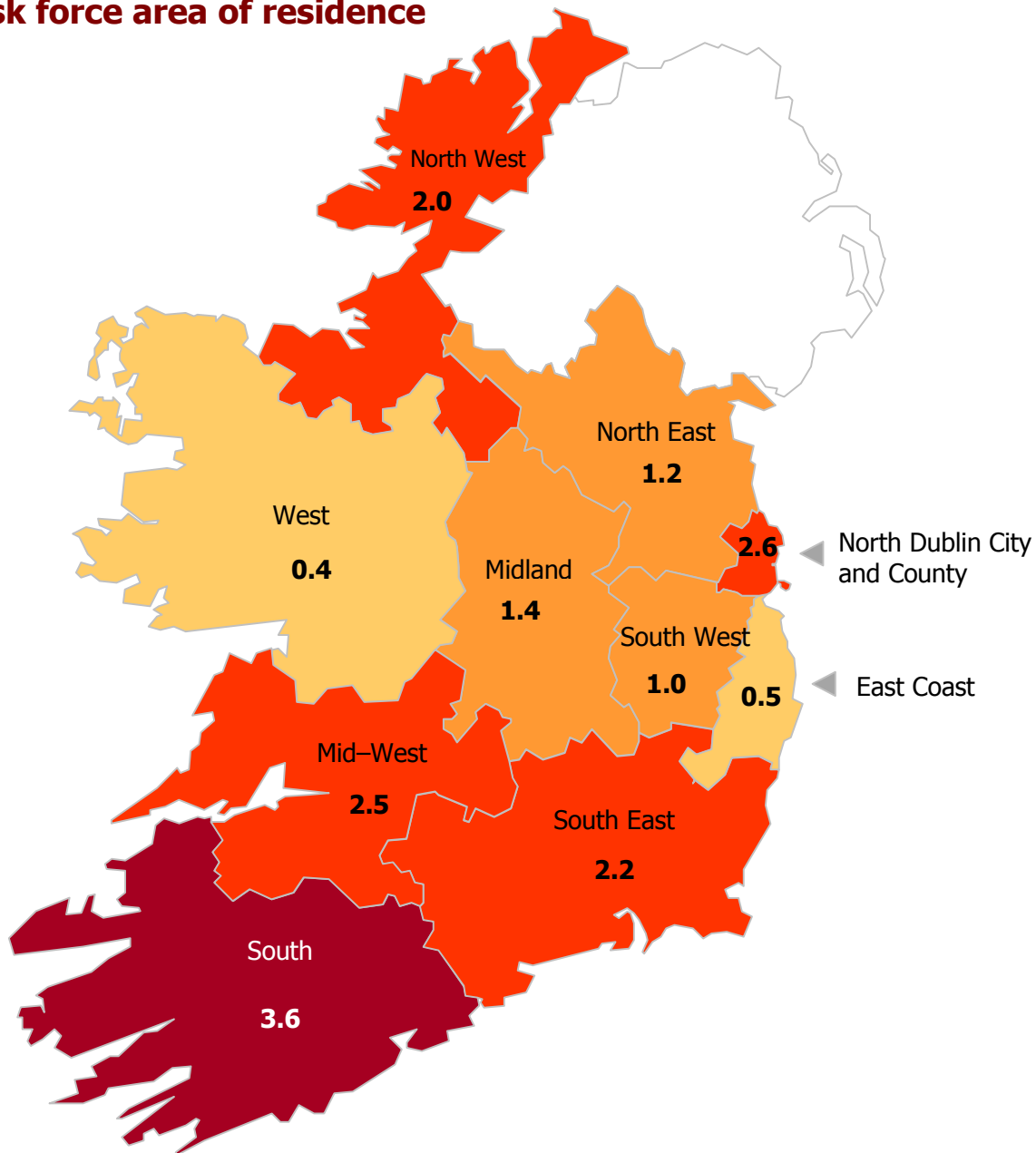
Per 100,000 of the population aged 15-64

0 to 0.9 cases

1 to 1.9 cases

2 to 2.9 cases

3 or more cases



NDTRS, 2003-2008





# benzodiazepine as a **main** problem substance

- 78% of cases entering treatment reported using more than one drug.
- alcohol (52%), cannabis (43%) and opiates (40%) were the most common additional problem substances

NDTRS, 2003-2008



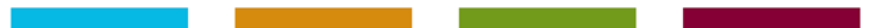


# benzodiazepine as an **additional** problem substance

The **main** problem substances reported were

- opiates (80% of cases)
- alcohol (9%), cannabis (5%), cocaine (5%)

NDTRS, 2003-2008





# Poisoning deaths where a benzodiazepine was implicated

- alcohol was the substance most frequently implicated (41%), followed by methadone (36%).
- cases where cocaine was implicated increased over the reporting period

NDRDI, 1998-2007

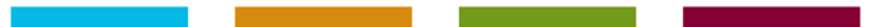




# Patterns of use

- 98% of benzodiazepine cases reported taking it orally
- 64% reported using benzodiazepine daily

NDTRS, 2003-2008





# Demographics

- **new cases**
  - **main** substance: median age decreased from 34 to 25 yrs
  - **additional** substance: median age increased from 24 to 26 yrs

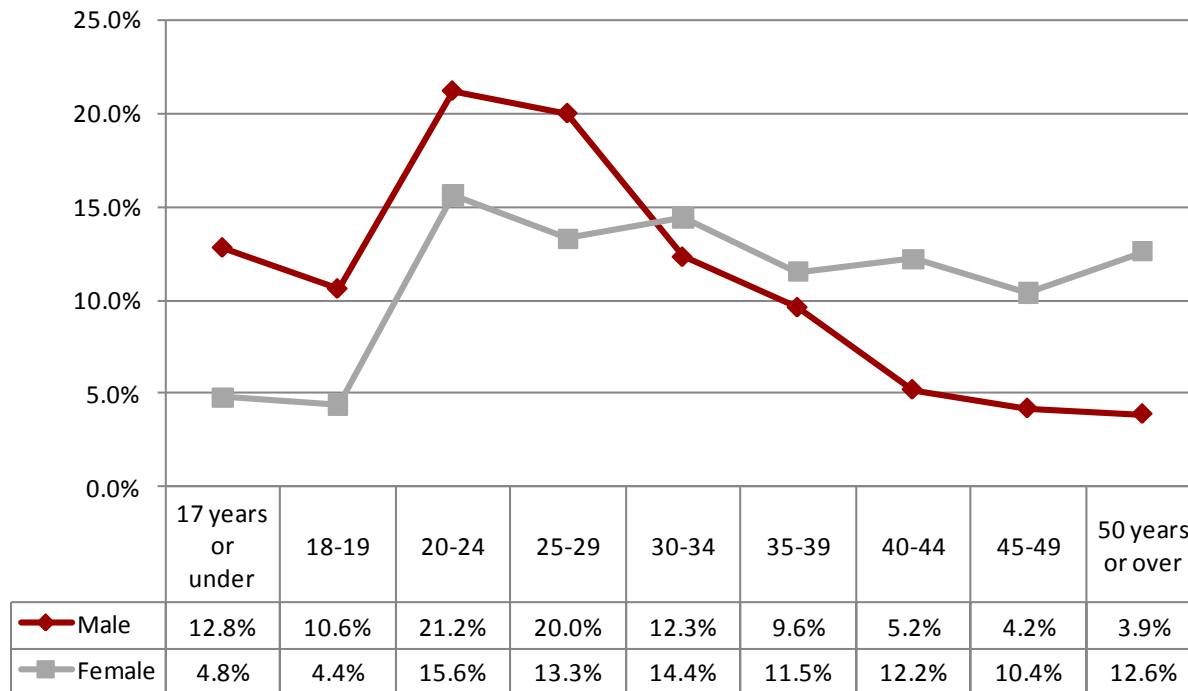
NDTRS, 2003-2008

- **deaths**
  - median age fluctuated, ranging between 33 and 39 yrs

NDRDI, 1998-2007



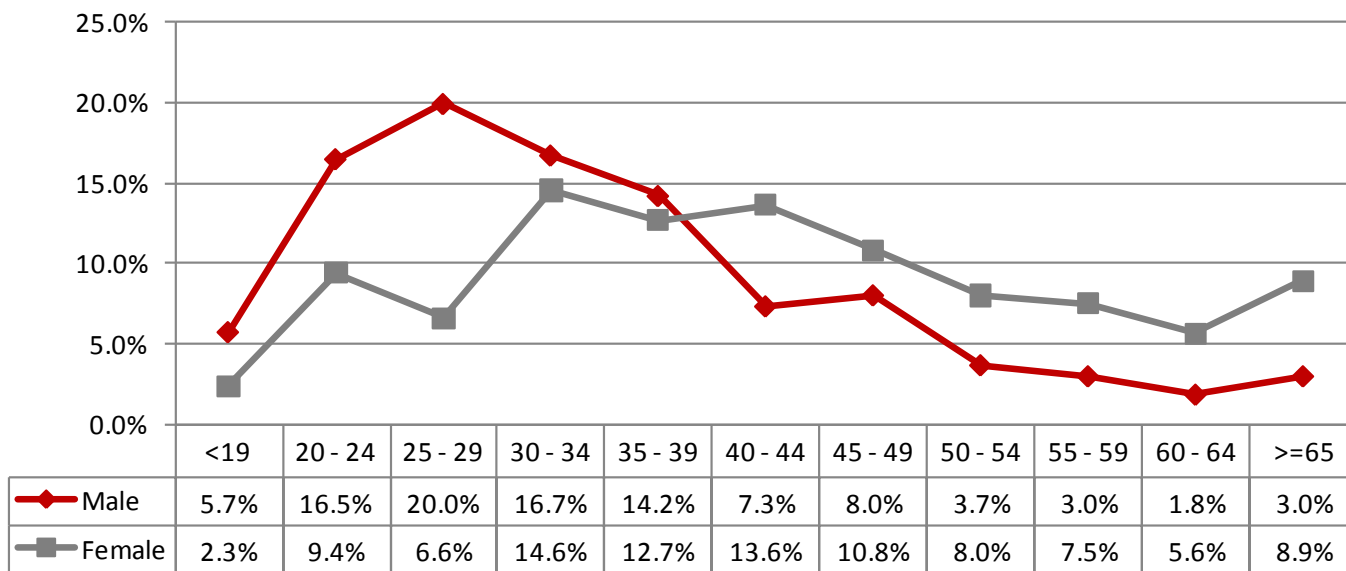
# Treated cases, by age group and gender



NDTRS, 2003-2008



# Poisoning deaths, by age group and gender



**NDRDI, 1998-2007**





# Conclusions

- different groups within the population of problem benzodiazepine users
- NDTRS and NDRDI data analysed side by side for a more complete picture of this problem

