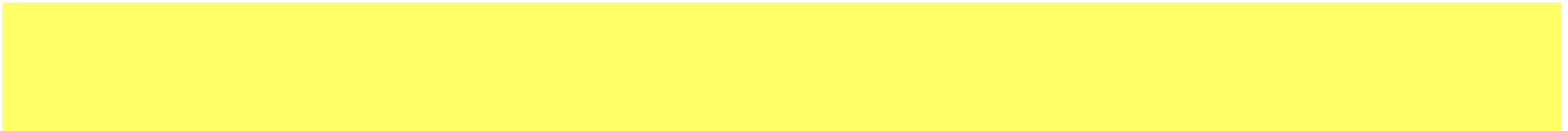


Ecstasy related deaths: analysis of National Coroners Information System data

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- 2004 Party Drugs Initiative (PDI) research team in Qld

- **National Coroners Information System (NCIS)**

- Mardie Hoy Information Access Officer

Background

- Ecstasy Market Indicators (EMI) project
 - NDLERF funded research on tools for monitoring illicit drug markets
 - There is a law enforcement perception that ecstasy is different to other drug markets
 - EMI summarised general and special population survey data about consumers and,
 - Expanded the PDI/EDRS triangulated methodology of interviewing regular consumers, key experts (including suppliers) & analysed of a broader range of indicator data
 - Including health service utilisation data and reported deaths

Monitoring Death

- Australian Institute of Health and Welfare Mortality Database (AIHWMD)
 - Data collected by ABS from Registrars of Birth Deaths and Marriages in each State and Territory
 - Coded by ABS using the ICD10
 - Published by ABS as the “Causes of Death – 3303.0”
 - These data populate the AIHWMD and drug related deaths are flagged.
 - ICD10 codes drug related deaths in a number of ways

ICD10 codes drug related deaths

FORMAT OF TABLES

ICD-10 Groups			External causes				
Broad category 1	Sub-category 2	Mental and behavioural disorders 3	Accidental 4	Intentional self-harm 5	Assault 6	Undetermined 7	Poison Codes 8
Psychostimulants	Amphetamines	F15	X41, X44	X61, X64	X85	Y11, Y14	T43.6
Narcotics	Heroin	F11, F19	X42, X44	X62, X64	X85	Y12, Y14	T40.1
Narcotics	Other opioids	F11, F19	X42, X44	X62, X64	X85	Y12, Y14	T40.2
Narcotics	Cocaine	F14, F19	X42, X44	X62, X64		Y12, Y14	T40.5

Note:

Column 1 — broad category of drugs.

Column 2 — sub-category of drugs within each broad category.

Column 3 — codes for Mental and behavioural disorders. (Accidental death of a deceased person identified as dependent on drugs.)

Columns 4 to 7 — codes for accidental or violent deaths for each drug type.

Column 8 — poison code used for deaths due to an overdose, toxicity or poisoning. These codes are generally used for deaths classified as external causes.

Coding drug related deaths

CORONER'S FINDINGS

Intent	Accidental death
Mechanism	Poisoning by solid substances
Causes of death	Combined drug intoxication (drugs involved: morphine, doxylamine and nortriptyline) Ischaemic heart disease

INFORMATION HELD ON THE ABS DEATHS DATASET

Variable	ICD-10 code	Code Description
Underlying cause	X44	External cause code used to identify accidental deaths due to multiple drug use
Multiple cause	I25.9	Medical condition — ischaemic heart disease
Multiple causes	T40.2, T45.0, T43.0	Poison codes for all drugs listed with toxic levels
Multiple causes(a)	X44	Underlying cause code is repeated in this field for all deaths

(a) The variable Multiple Causes contains the underlying cause and any associated or contributory causes or conditions reported on the Medical Certificate of Cause of Death

Monitoring Death (ii)

- National Coroners Information System (NCIS) contains Coroners' files
- These files include:
 - Police investigation reports
 - Autopsy reports
 - Supporting medical reports (such as toxicology)
 - Coroners' findings
- The database contains both coded and non-coded data
- Records can be searched through specific fields and,
- Full text searches can also be conducted using particular words or expressions.

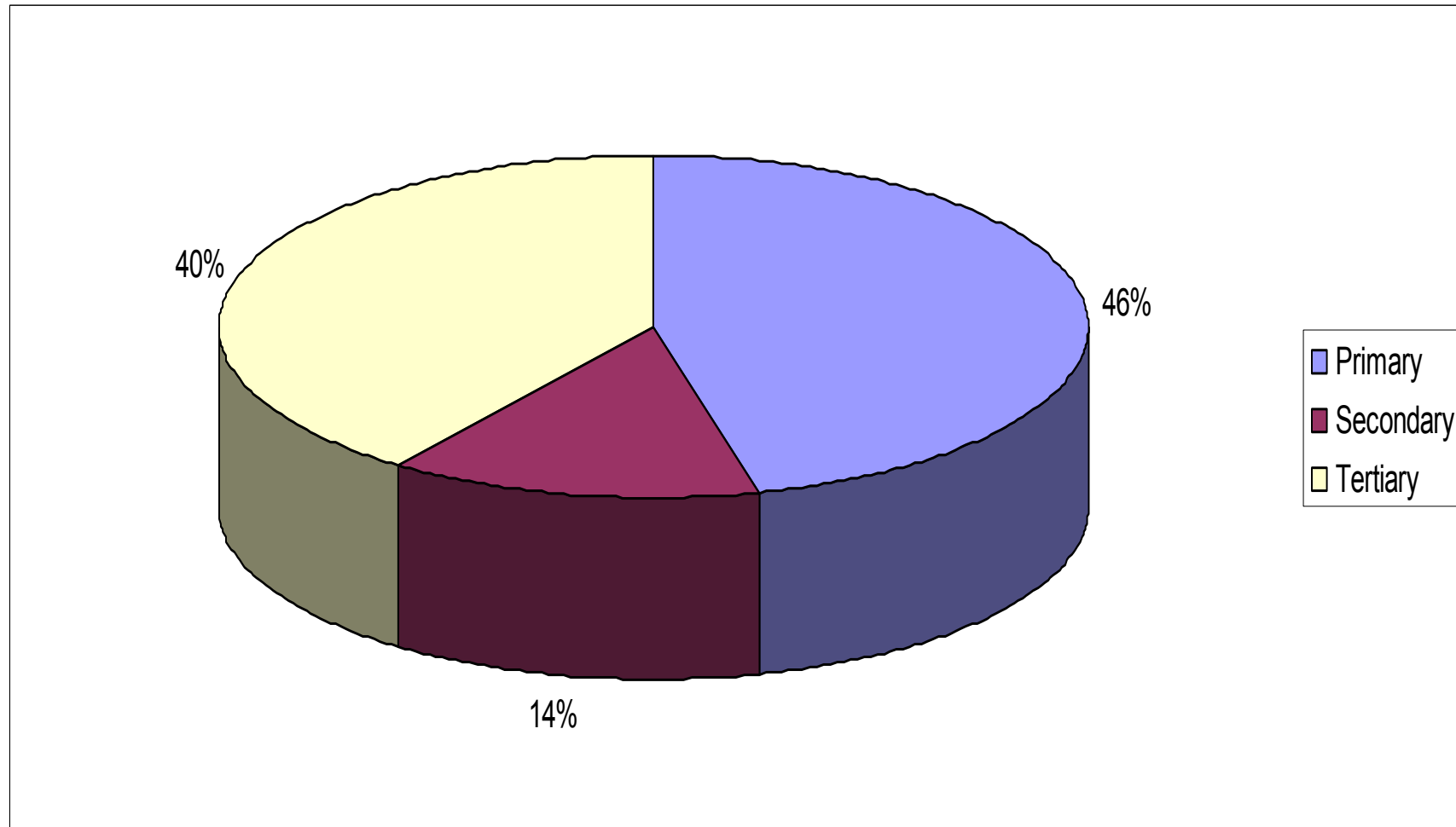
Method

- The NCIS conducted a detailed database search of coded fields and of full text files using a search strategy developed collaboratively by the NCIS and EMI project team for the period 2001-2004
- Search terms related to pills or tablets AND drug terms associated with ecstasy
- The NCIS assessed the extent to which ecstasy had a primary, secondary or tertiary attribution to the death
- This assessment was based on the pathologists notes and the coroner clerks' coded rating of the object involved in the death

Results

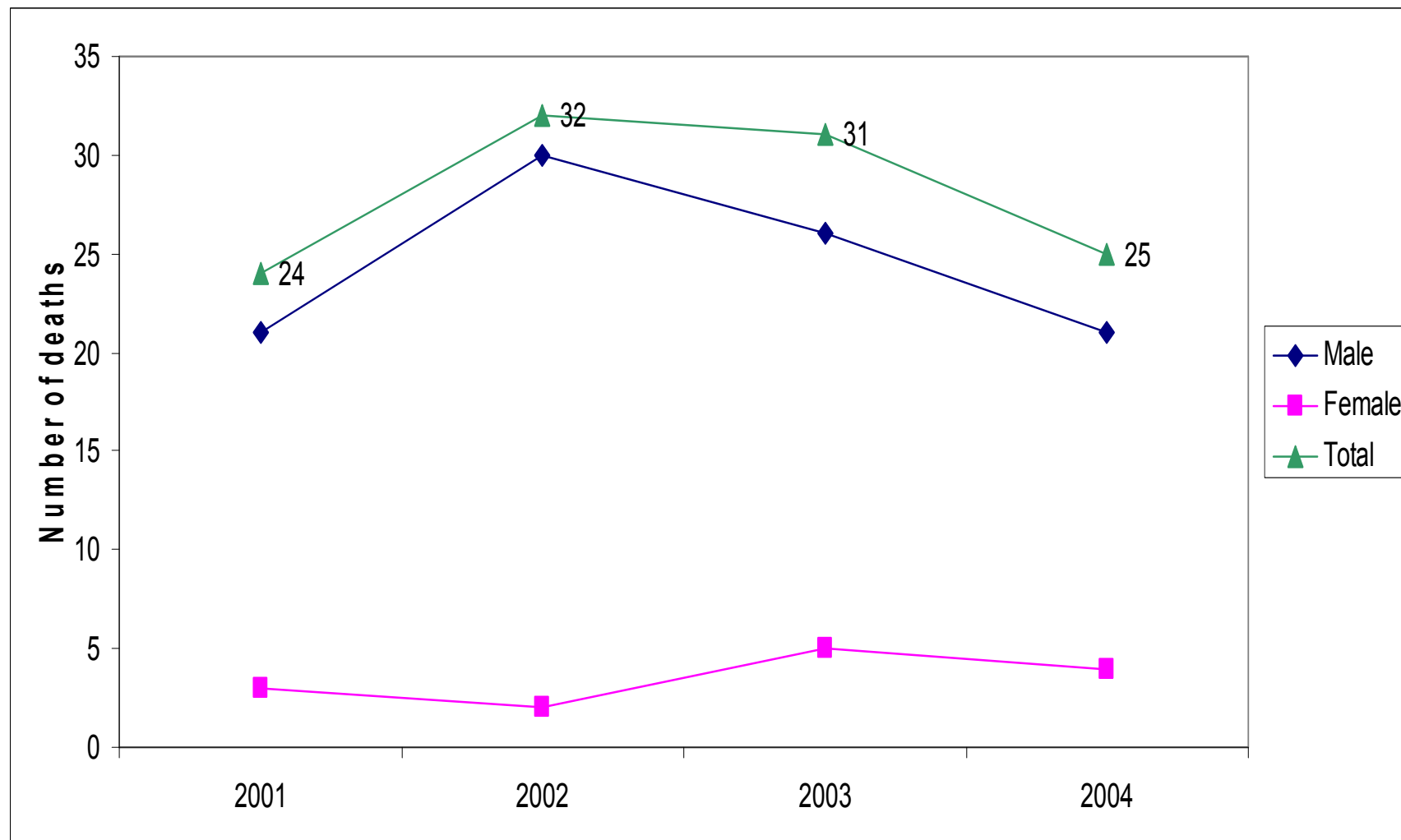
- The NCIS identified 112 cases of ecstasy related deaths in Australia, 2001-2004
- Of these:
 - 51 cases had a primary attribution to ecstasy
 - 16 cases had a second attribution to ecstasy
 - 45 cases had a tertiary attribution to ecstasy

Level of involvement of ecstasy in death, 2001 - 2004

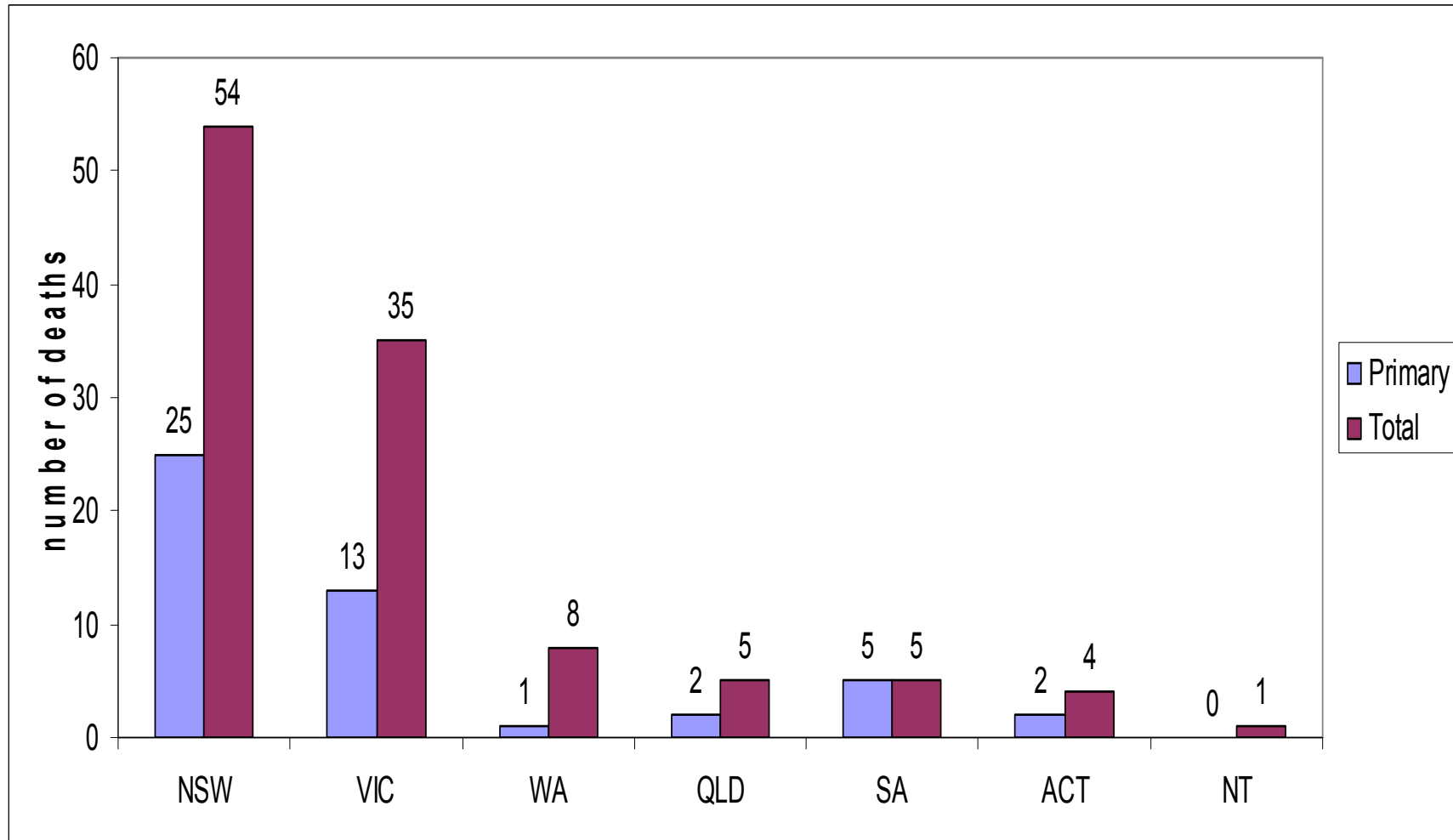


N = 112

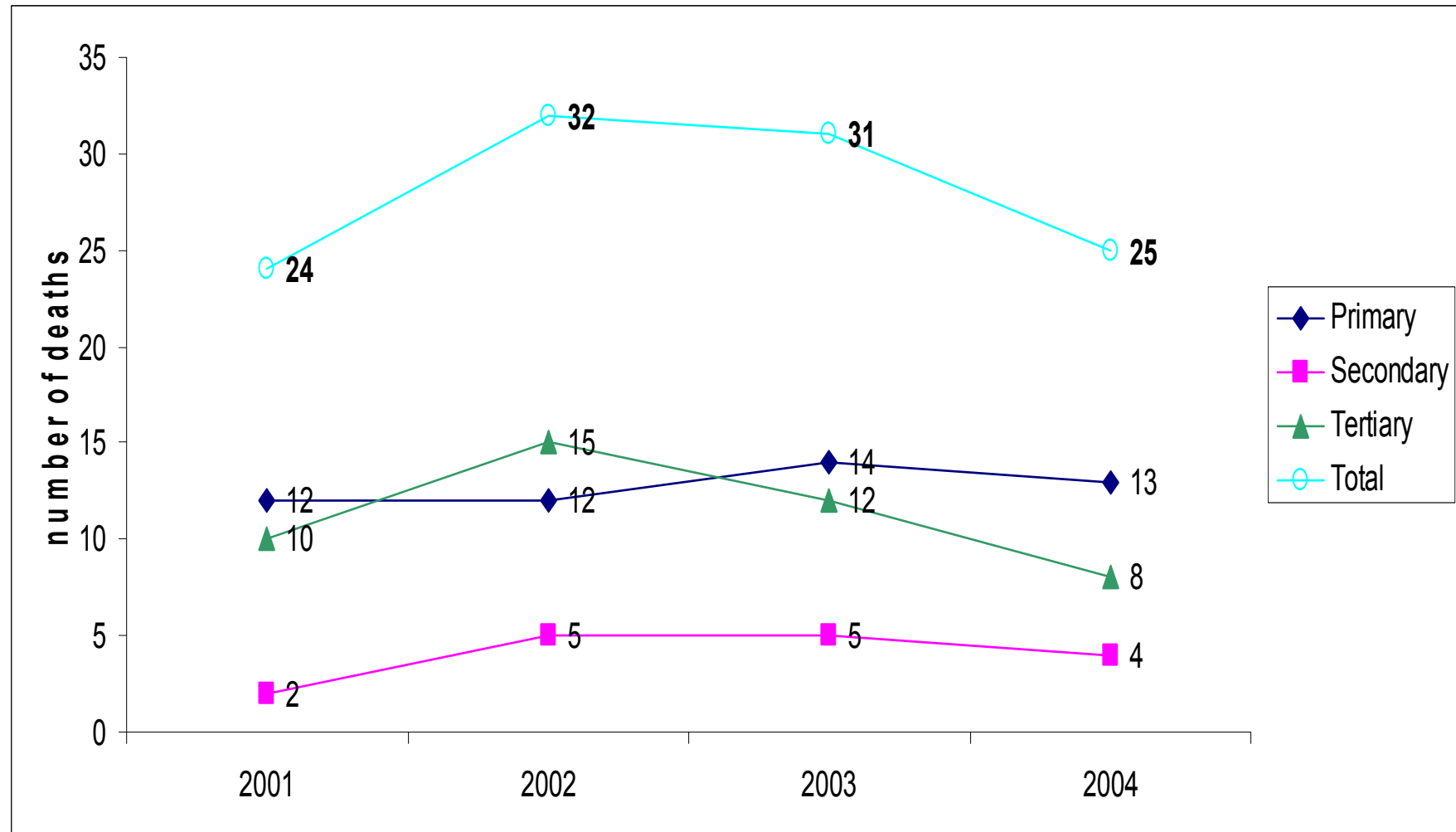
Number of ecstasy deaths in Australia, by gender and year 2001 - 2004



Number of ecstasy-related deaths and number where ecstasy was a primary contributor, jurisdiction, 2001-2004



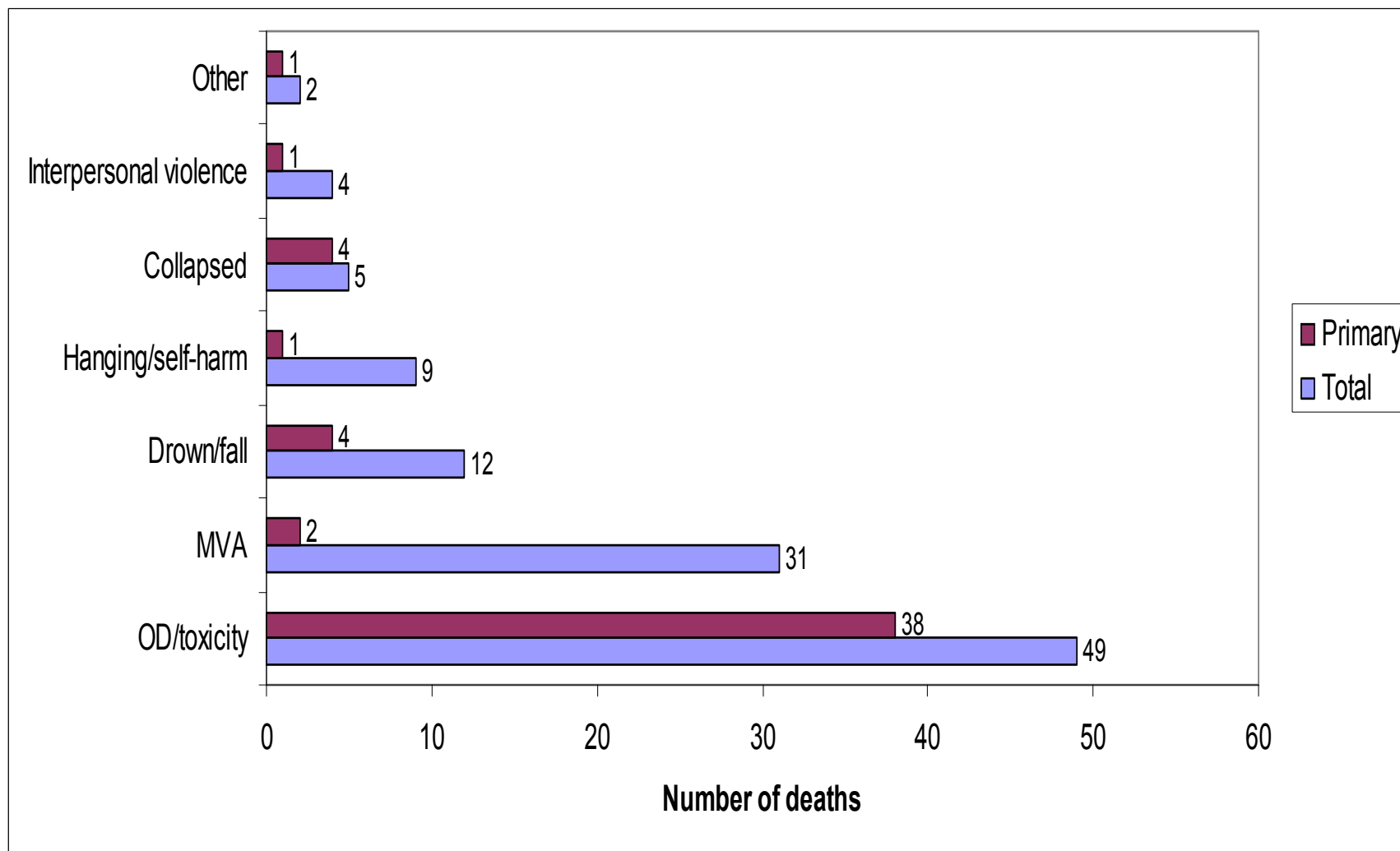
Number of ecstasy deaths in Australia by contribution to death and year, 2001 - 2004



Number of ecstasy deaths in Australia by contribution to death and year, 2001 - 2004

	Primary	Secondary	Tertiary	Total
2001	12	2	10	24
2002	12	5	15	32
2003	14	5	12	31
2004	13	4	8	25

Summary of cause of death by primary contribution and by total deaths, 2001 - 2004



Limitations

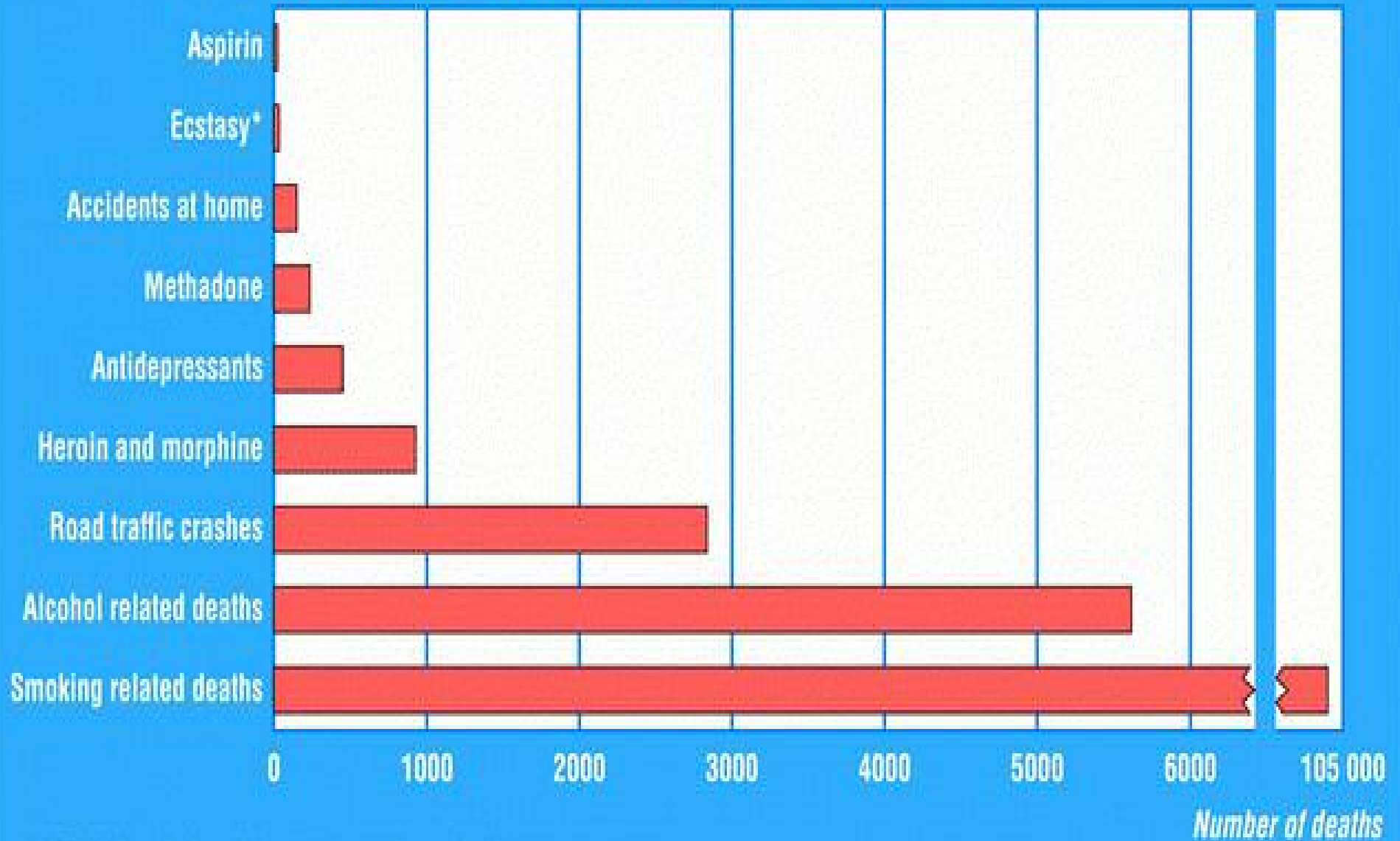
The NCIS provided following disclaimer in relation to the data obtained for the EMI study:

“This data set does not purport to be representative of all national deaths reported to the coroner involving ecstasy over the time period stated. Due to occasional coding errors, some missing data and some cases not being closed, it is possible that some relevant deaths were not included in this data set.”

Discussion

- Death from ecstasy does occur in Australia
- Death from MDMA alone is rare
- Ecstasy may contribute to deaths where other drug intoxication and risk taking behaviour occurs
- Data about ecstasy related deaths needs to be treated with caution

Deaths from various causes in England and Wales in 2000



* MDMA (methylenedioxymethamphetamine)

McKenna 2000

Source: Health Statistics Quarterly, Department of Health, Office for National Statistics, ASH (Action on Smoking and Health)

Discussion

- ICD10 could be revised with a poison code for phenethylamine drug of T43.7
- Better education for coroners and coroner's clerks about population health
- Consistent national coding
- Importance of mortality analysis for harm reduction strategies and promoting population health
- Better data and more effective communication may reduce media hysteria and resulting poor public policy on drug related harms