

# The Australian Experience: Data and Interpretation

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Roundtable: The illicit drug market and its possible regulatory body. Rome 16th to 17th Sept, 2009

# Aims

- Types of data collection in Australia
- Trends in prevalence and frequency of use
- Market indicators
- Comparisons between Aus and other countries
- Interpretation and analysis

# Data collection in Australia

## General Population Surveys

### 1. Household Survey

- Started in 1985, administered every three years (1985, 1988, 1991, 1993, 1995, 1998, 2001, 2004, 2007: n=23,356)
- Age 14+

### 2. School students survey

- Started in 1996, administered every 3 yrs (1996, 1999, 2002, 2005: n=21,805)
- Students aged between 12 and 17 years

## Targeted surveys of drug users

1. IDRS: survey of injecting drug users, annual since 1996
2. EDRS: survey of regular ecstasy and related drug users, annual since 2003
3. Police detainees , annual since 1999

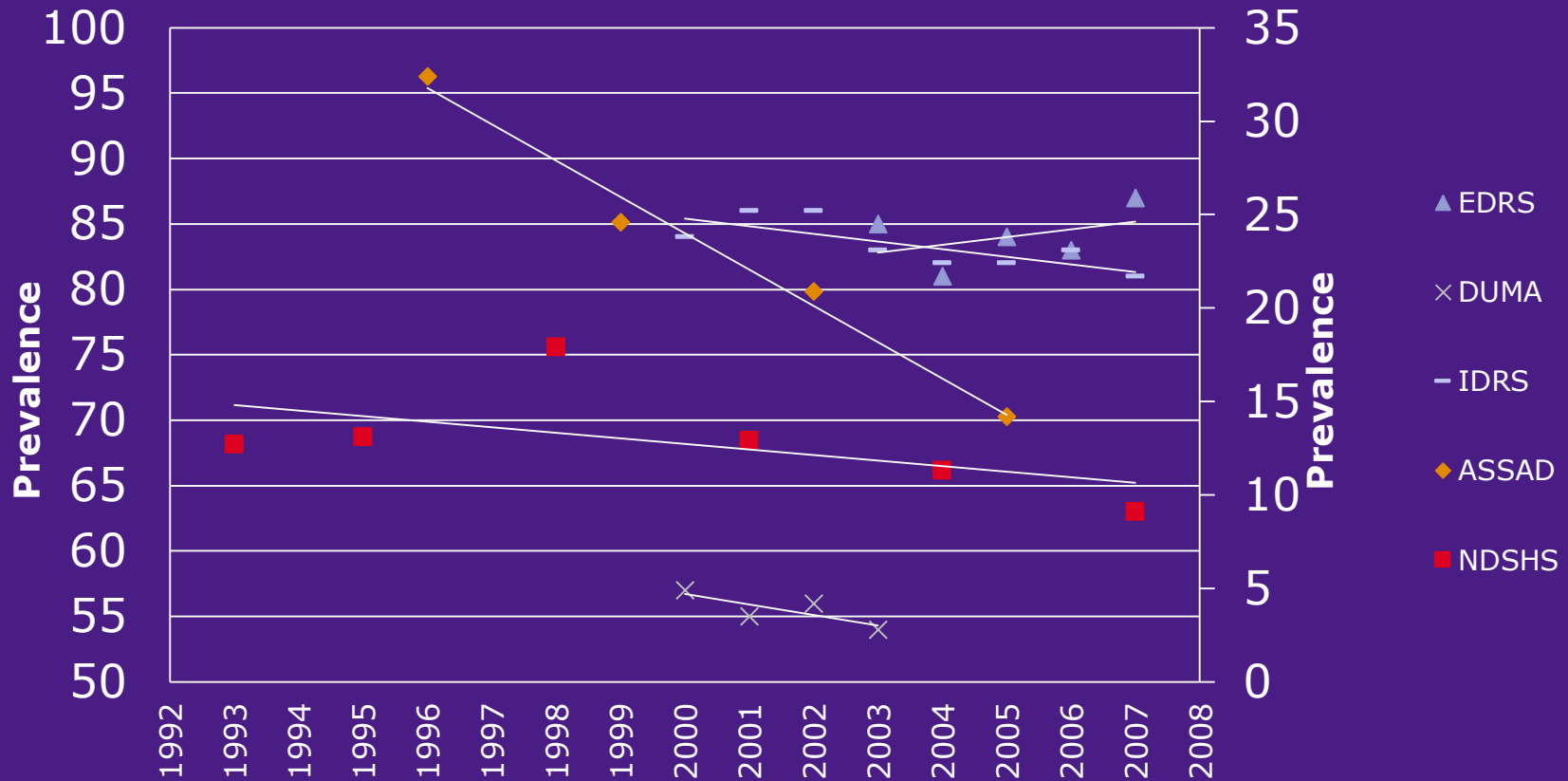
## Routine health and crime data

- Treatment episodes
- Hospital presentations for drug-related conditions (eg overdose)
- Arrest rates
- Seizures (number and size)

# Trends in prevalence

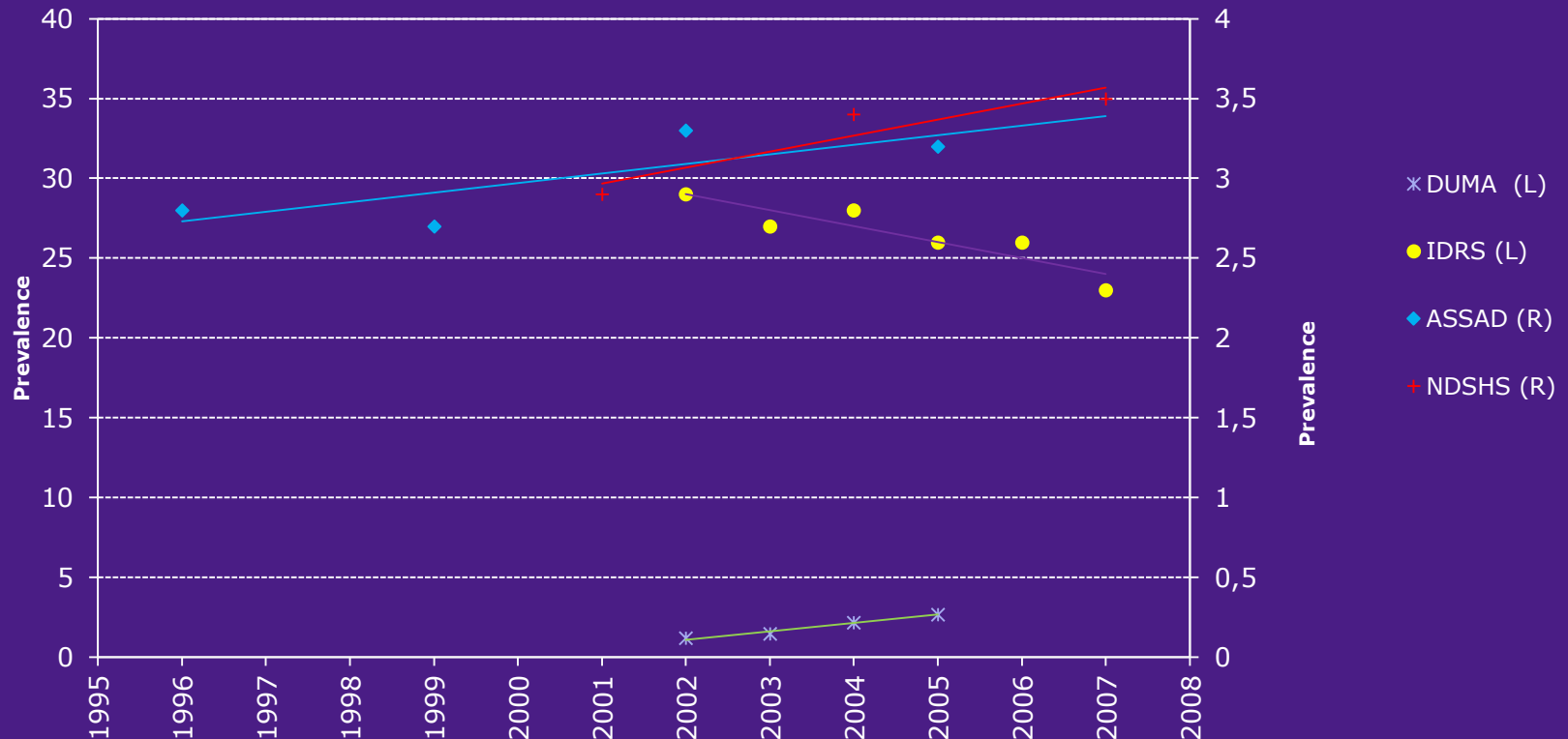
- Cannabis
- Ecstasy
- Heroin
- Methamphetamine
- Cocaine

# Recent cannabis use across multiple surveys



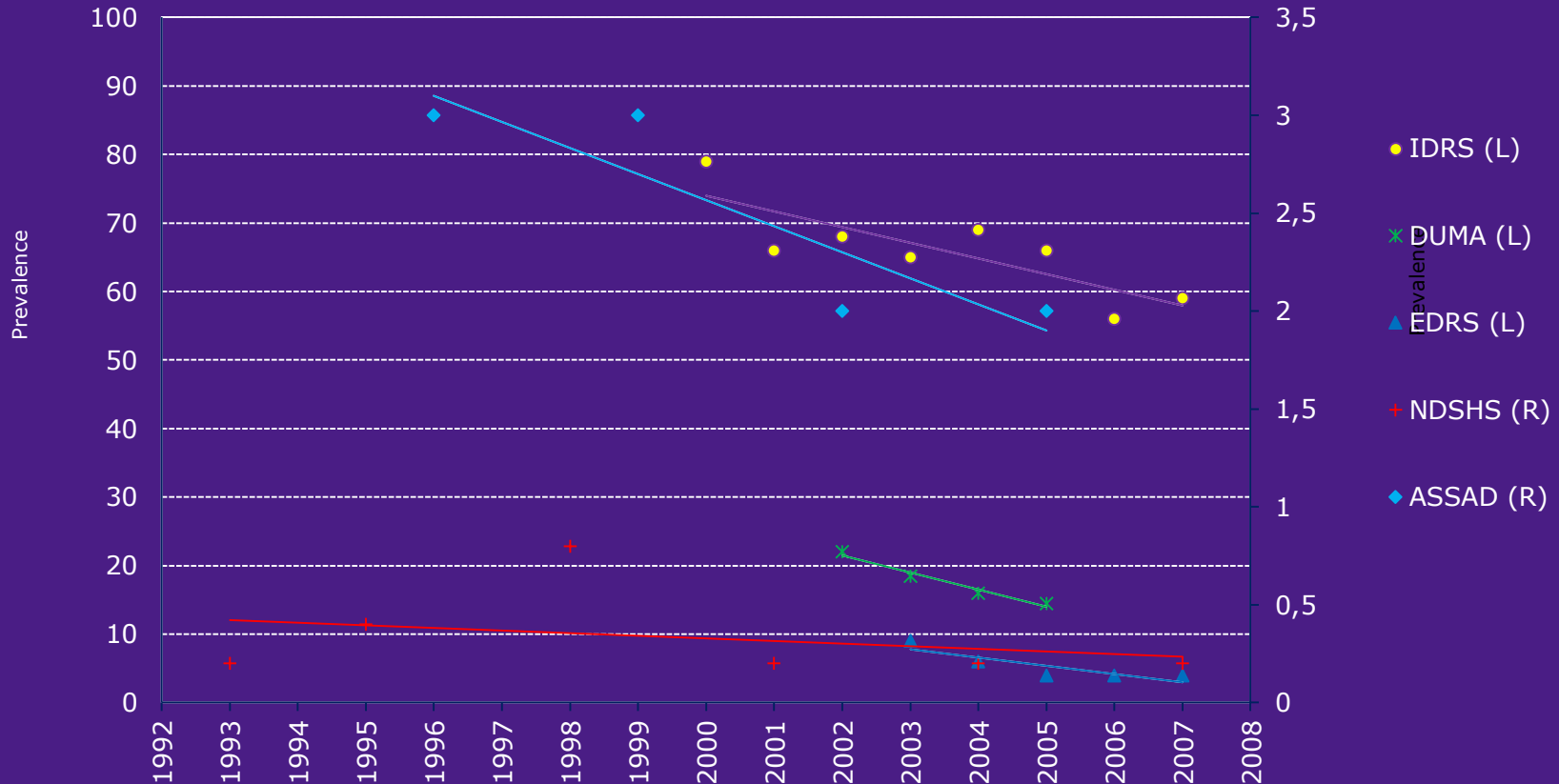
**Source:** National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA. Drug use monitoring in Australia: annual reports on drug use among police detainees, AIC. Findings from the Ecstasy and Related Drugs Reporting System, NDARC. Findings from the Illicit Drug Reporting System, NDARC.

# Recent ecstasy use across multiple surveys



**Source:** National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA. Drug use monitoring in Australia: annual reports on drug use among police detainees, AIC. Findings from the Ecstasy and Related Drugs Reporting System, NDARC. Findings from the Illicit Drug

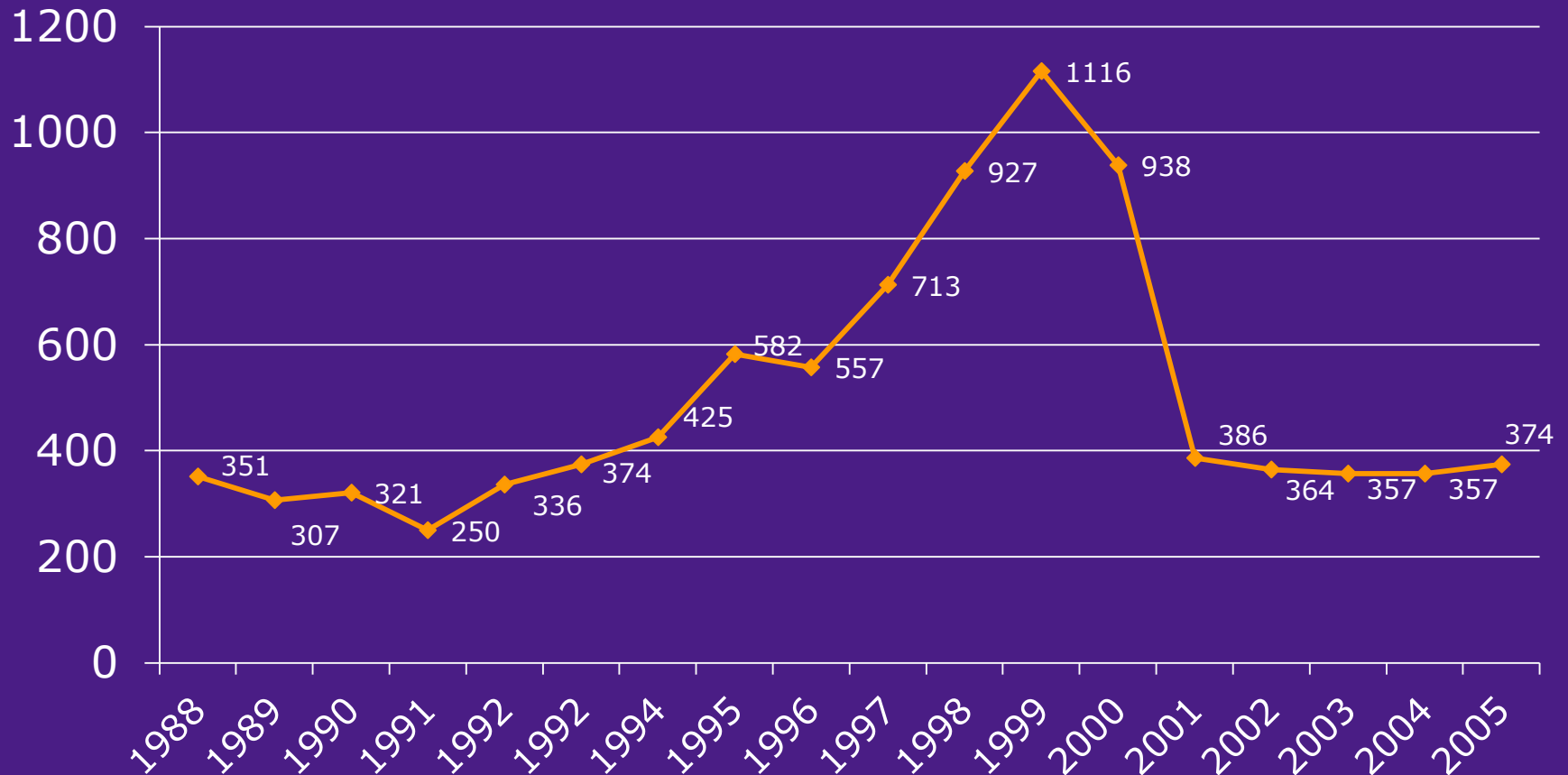
# Recent heroin use across multiple surveys



**Source:** National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA. Drug use monitoring in Australia: annual reports on drug use among police detainees, AIC. Findings from the Ecstasy and Related Drugs Reporting System, NDARC. Findings from the Illicit Drug Reporting System, NDARC.

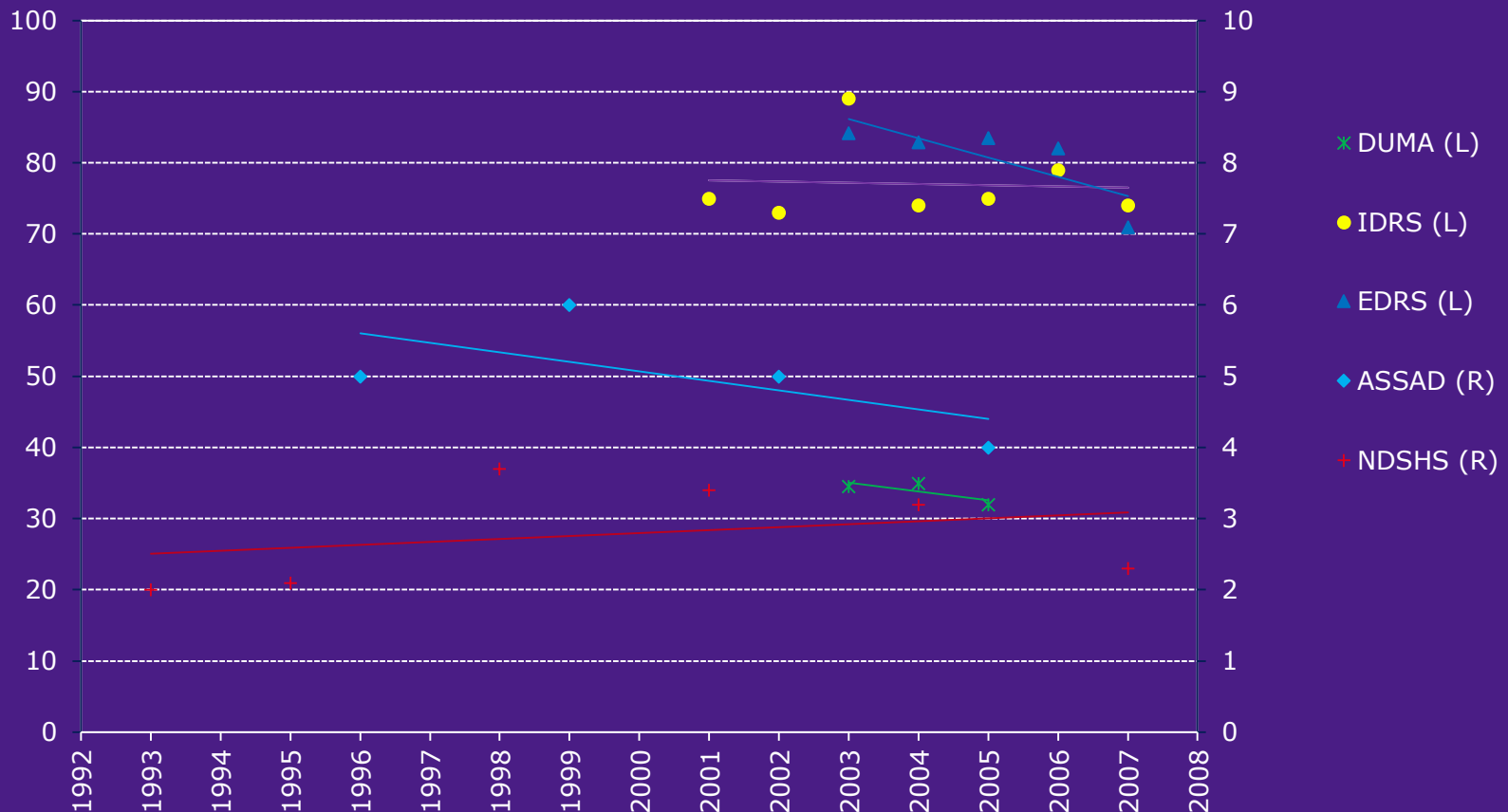


# Heroin overdoses (15-54 yrs), 1988-2005



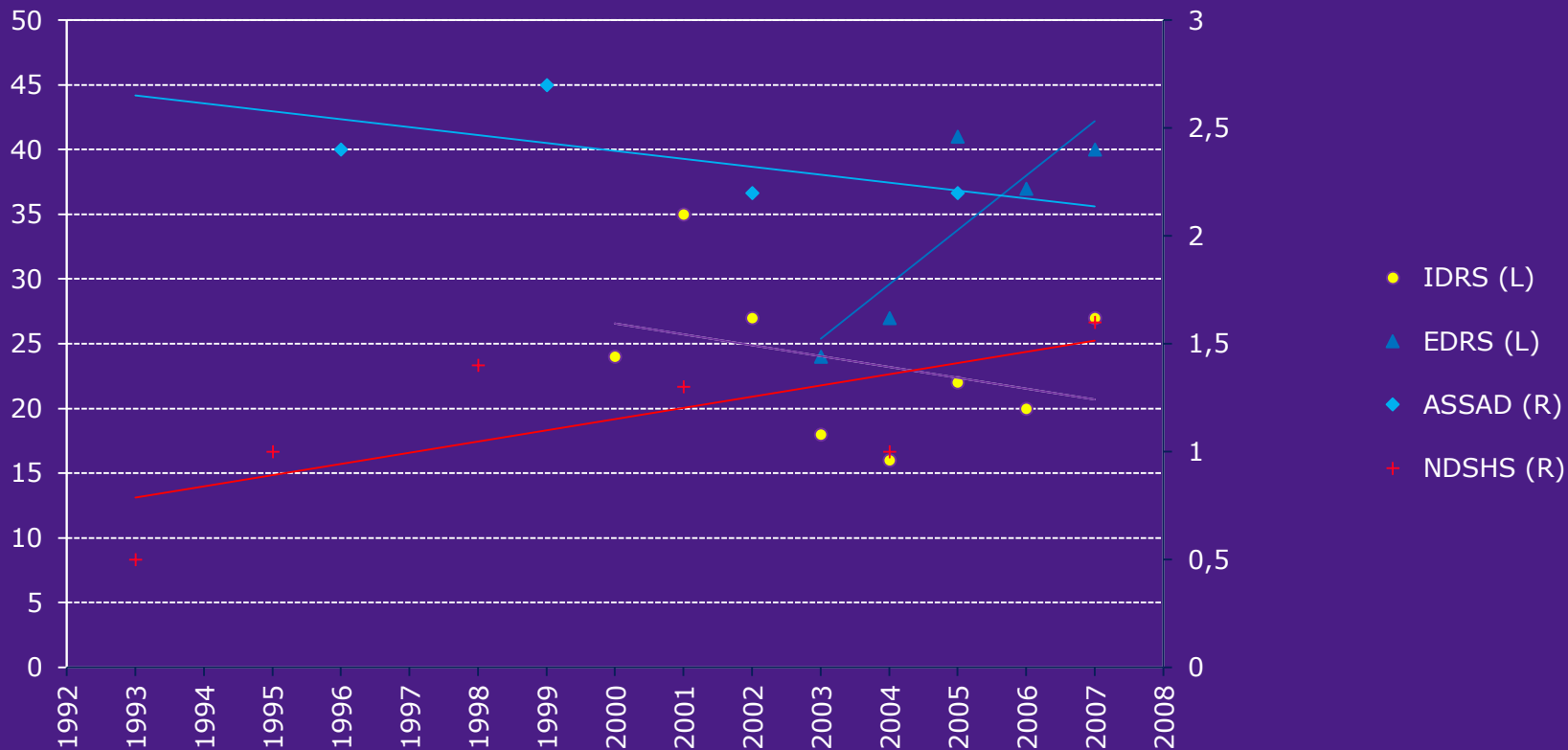
**Source:** Degenhardt, L., and Roxburgh, A. (2007). Accidental drug-induced deaths due to opioids in Australia, 2005. Sydney: National Drug and Alcohol Research Centre

# Recent methamphetamine use across multiple surveys



**Source:** National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA. Drug use monitoring in Australia: annual reports on drug use among police detainees, AIC. Findings from the Ecstasy and Related Drugs Reporting System, NDARC. Findings from the Illicit Drug Reporting System, NDARC.

# Recent cocaine use across multiple surveys

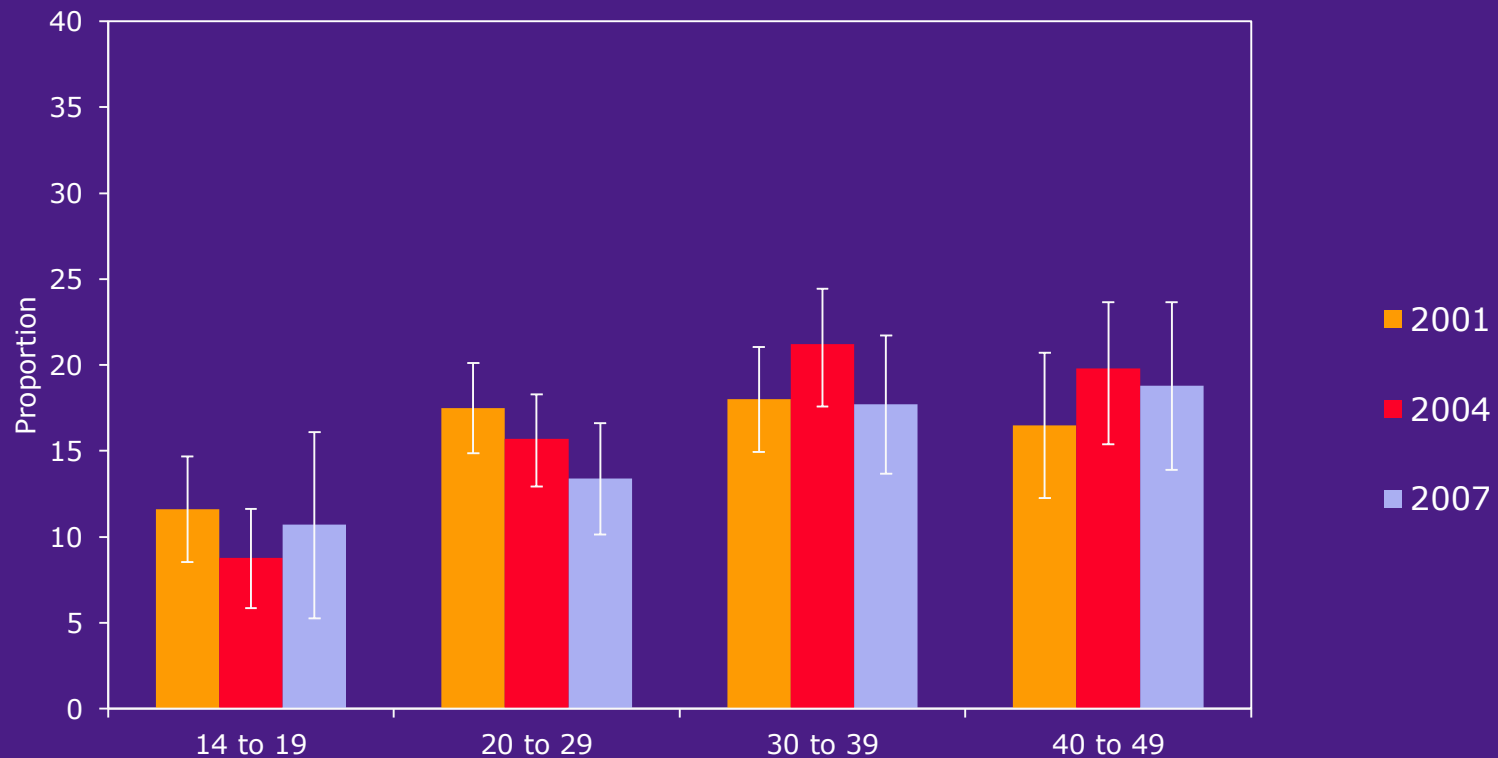


**Source:** National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA. Drug use monitoring in Australia: annual reports on drug use among police detainees, AIC. Findings from the Ecstasy and Related Drugs Reporting System, NDARC. Findings from the Illicit Drug Reporting System, NDARC.

# Trends in frequency of use (intensity)

- Problem with simple prevalence
- Intensity (frequency) of use amongst users most important as harm indicator
  - Cannabis
  - Heroin
  - Methamphetamine
  - Ecstasy

# Proportion of recent cannabis users reporting daily cannabis use



Source: National Drug Strategy Household Surveys, AIHW

# Heroin, intensity of use (daily)

Year	%
2001	19.7
2002	26.4
2003	29.0
2004	25.2
2005	24.2
2006	16.6
2007	23.0
2008	18.3

# Amphetamine, intensity of use (weekly)

Year	%
2001	19.7
2002	26.4
2003	29.0
2004	25.2
2005	24.2
2006	16.6
2007	23.0
2008	18.3

# Ecstasy, intensity of use (weekly)

Year	%
2001	10.3
2002	13.3
2003	7.9
2004	10.7
2005	9.0
2006	12.1
2007	8.9
2008	9.6



# Polydrug use

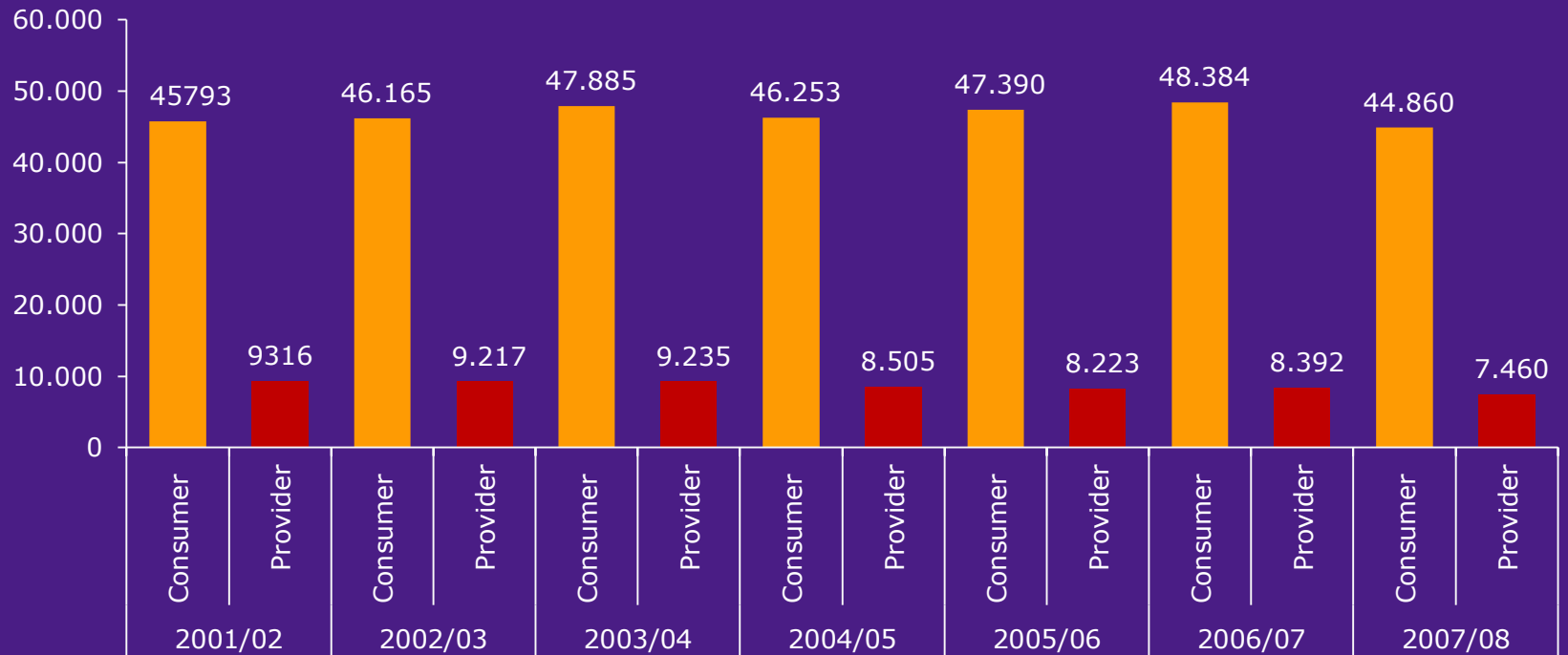
- Need to take seriously and revise estimation approaches
- Polydrug use:
  - Impacts on prevalence estimation
  - Impacts on harms
  - Impacts on the market (complements and substitutes)

- Polydrug use rates (at the same time)
  - Cannabis users: 87% + alcohol; 28% + ecstasy; 23% + amphetamine
  - Heroin users: 66% + cannabis; 39% + alcohol
  - Amphetamine users: 80% + alcohol; 63% + cannabis; 53% + ecstasy
- Substitution behaviour
  - Cannabis users: 59% alcohol if no cannabis available
  - Heroin users: 25% cannabis 17% benzo's; also pharma opioids and amph if no heroin available
  - Amphetamine: 38% alcohol; 17% ecstasy; also cocaine and heroin if no amph available

# Market indicators

- Arrests
  - Consumers: use and possess charges
  - Providers: dealing and trafficking
- Seizures
  - Weight
  - number

# Cannabis consumer and provider arrests

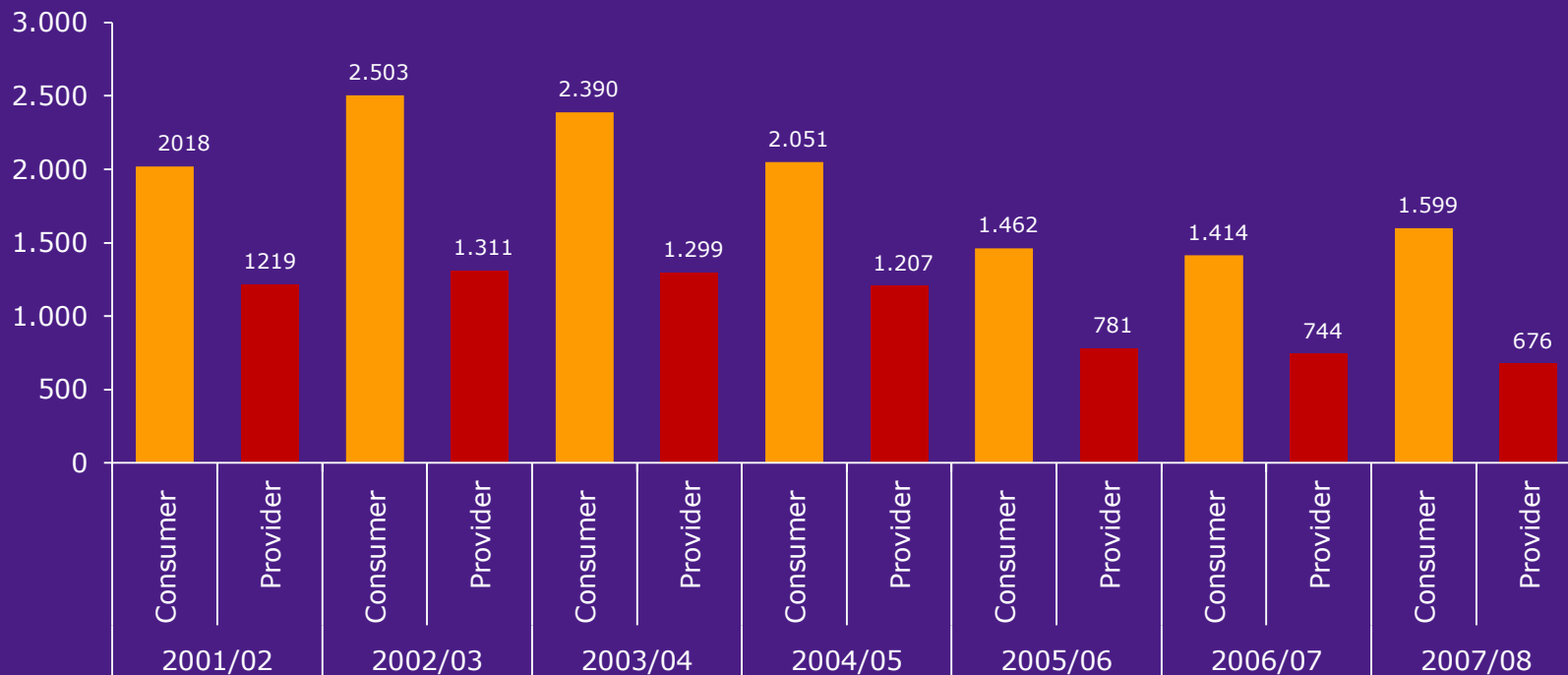


Source: Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

# Heroin consumer and provider arrests



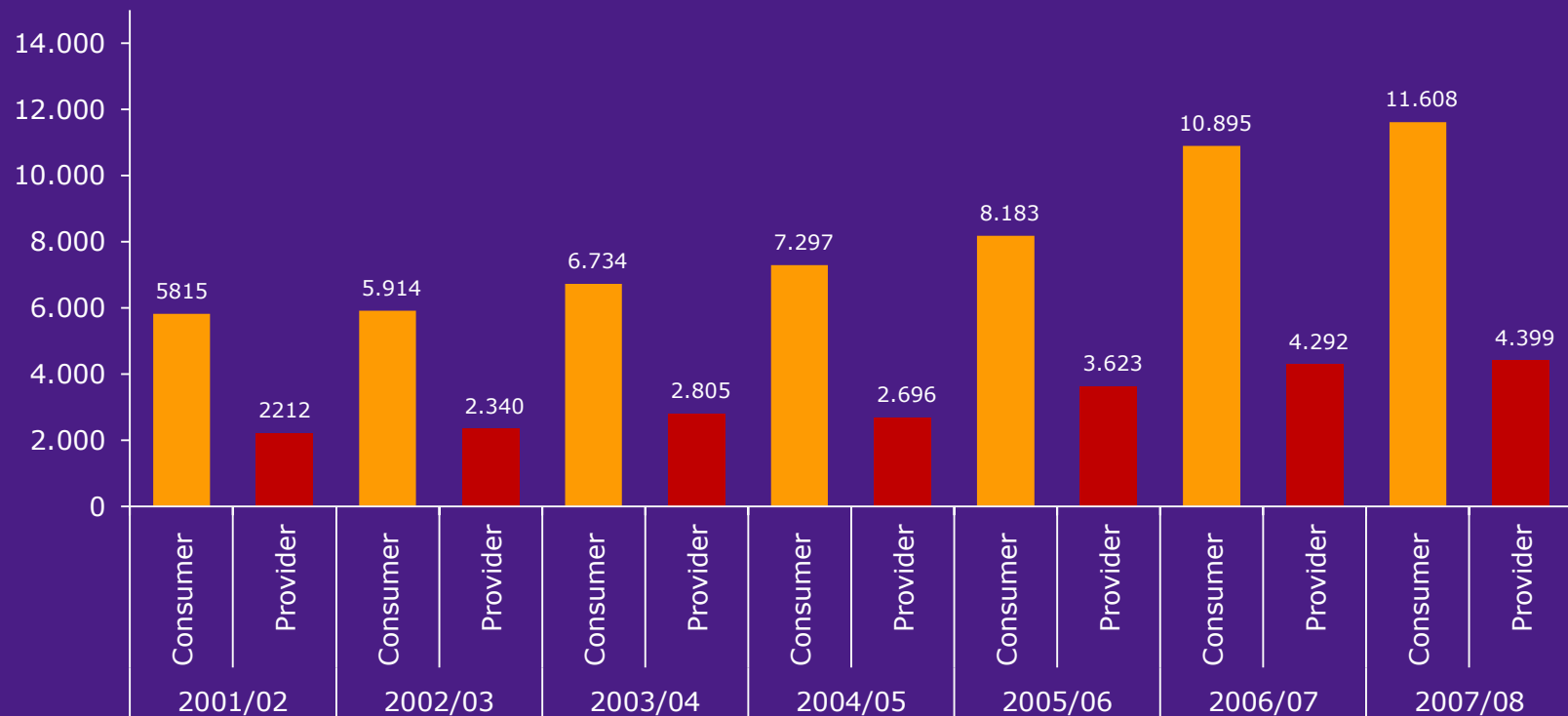
**DPMP**  
Drug Policy Modelling Program



Source: Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

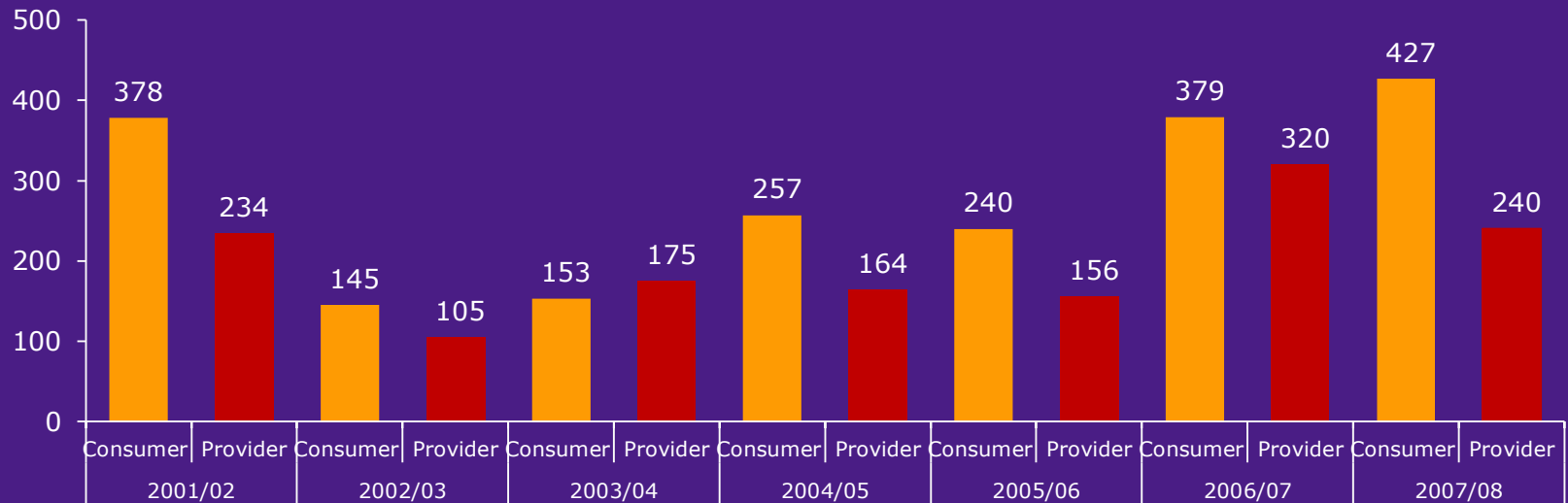


# Amphetamine Type Stimulant consumer and provider arrests



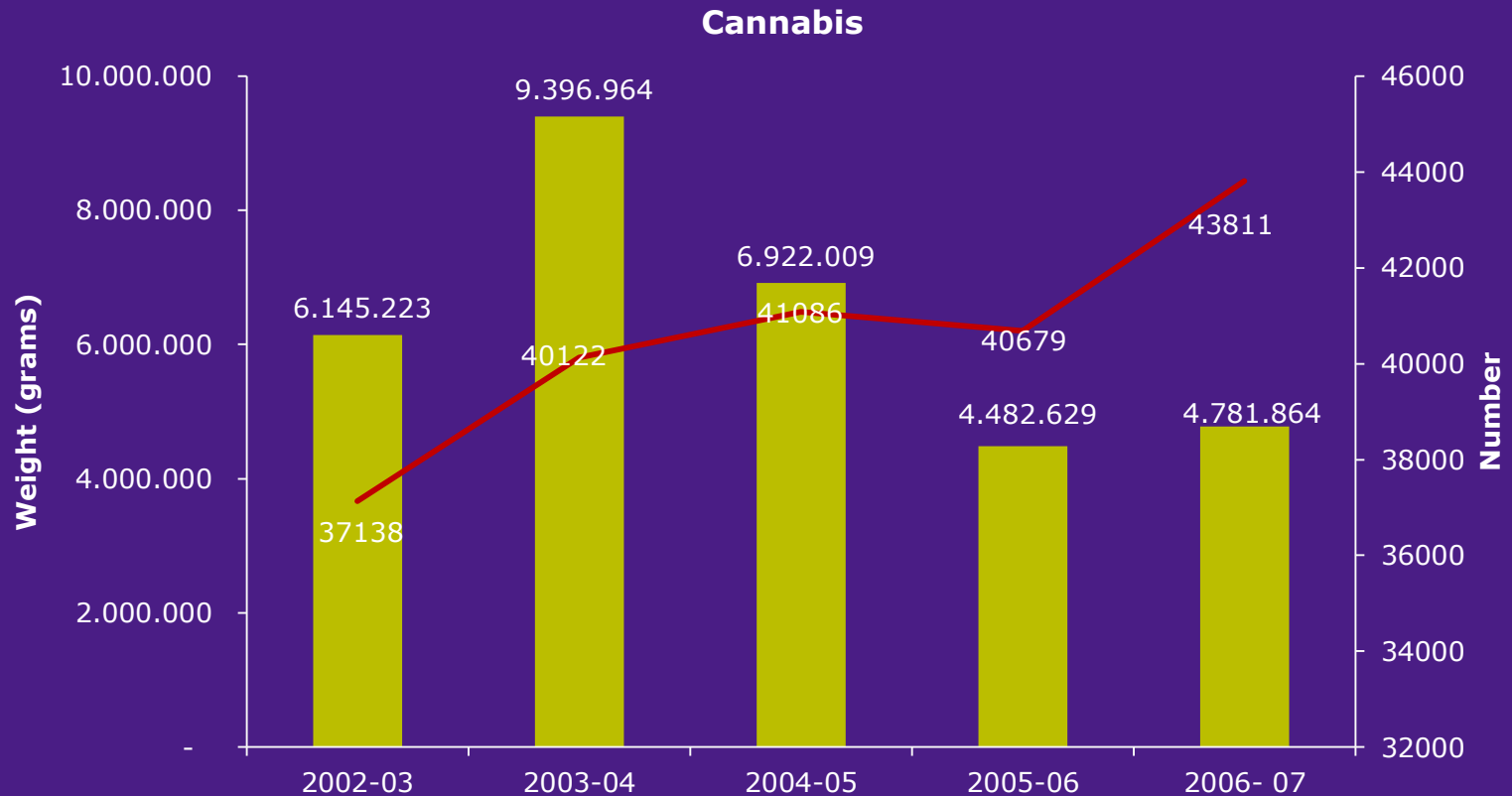
Source: Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

# Cocaine consumer and provider arrests



**Source:** Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

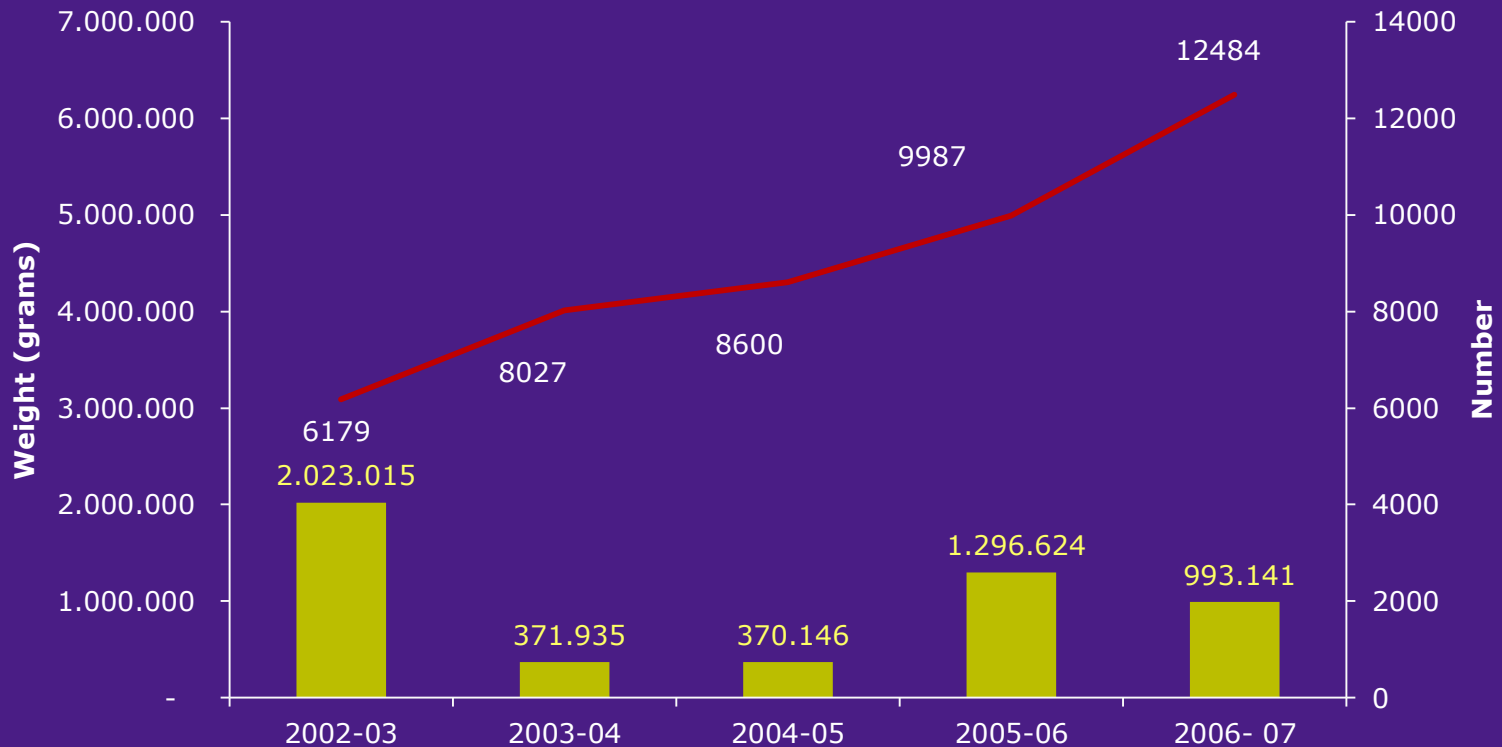
# Cannabis seizures – weight and number



Source: Illicit Drug Data Report, Australian Crime Commission

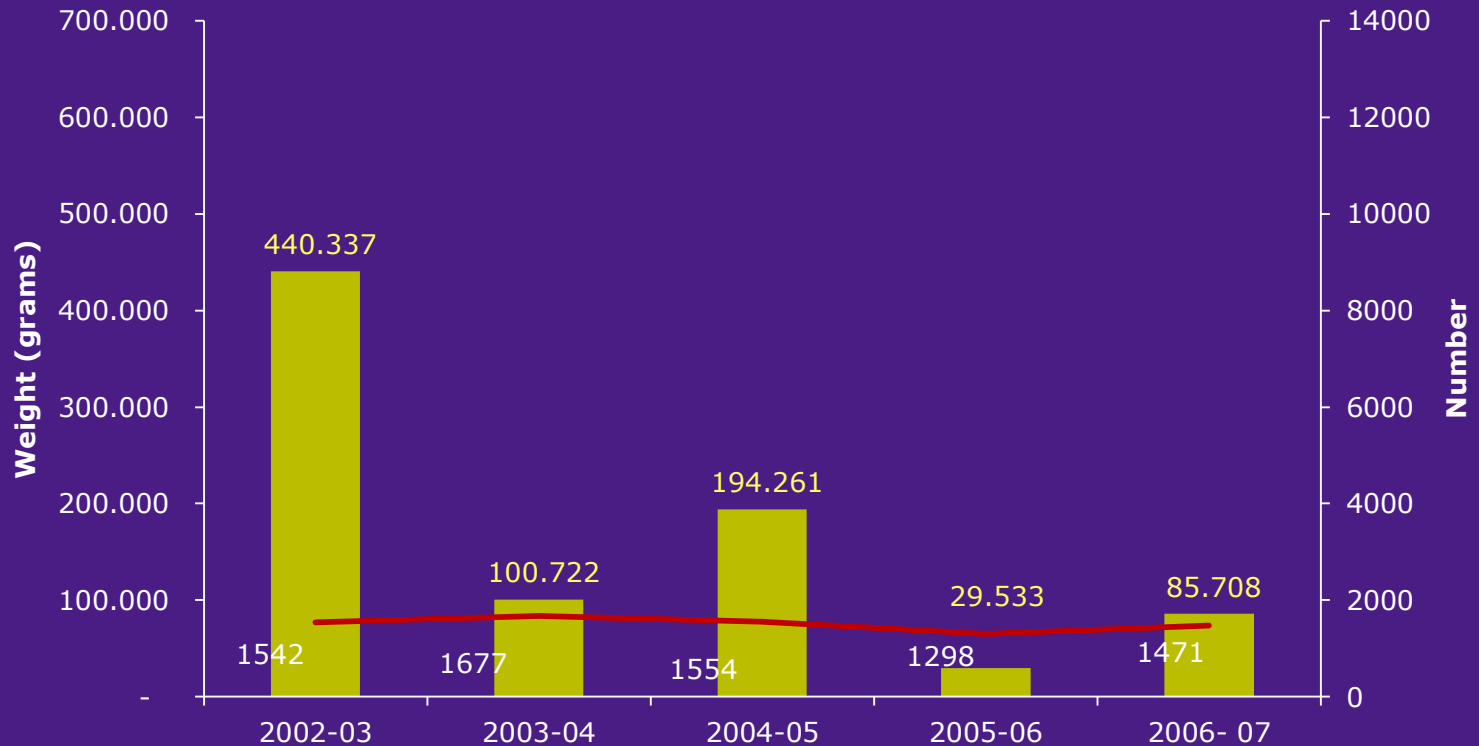


# Amphetamine seizures – weight and number (includes ecstasy)



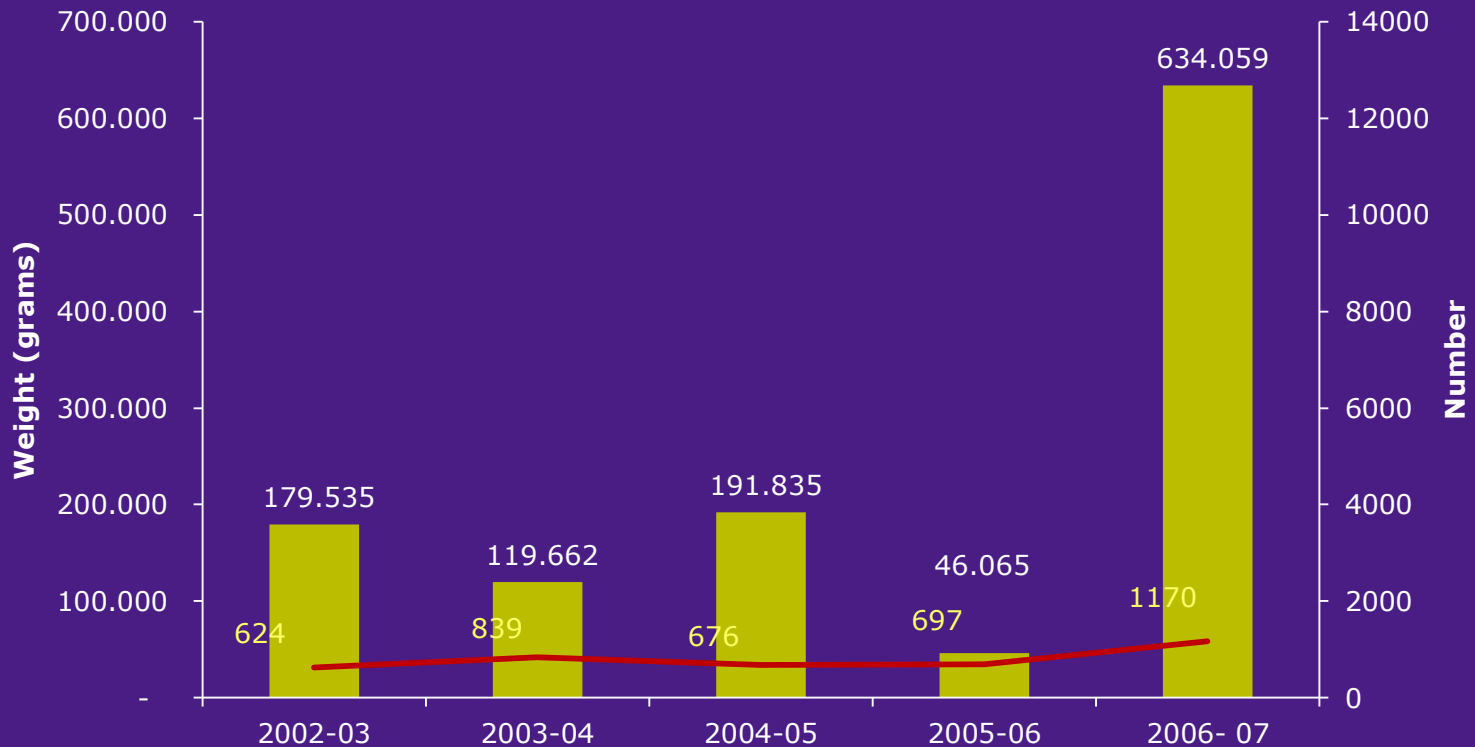
Source: Illicit Drug Data Report, Australian Crime Commission

# Heroin seizures – weight and number



Source: Illicit Drug Data Report, Australian Crime Commission

# Cocaine seizures – weight and number



Source: Illicit Drug Data Report, Australian Crime Commission

# Summary of trends

## Cannabis

- Prevalence of last year cannabis use in Australia has declined
- No change in daily cannabis use amongst existing users
- Seventy percentage of all drug-related use/possess arrests are for cannabis. This represents 44,860 people in 2007.

## Ecstasy

- Small rise in general population use.
- Amongst users, the intensity of ecstasy use is rising
- There is a decreasing trend in sentinel drug using populations, as demonstrated in both injecting drug use samples and those surveyed regarding ecstasy and related drug use.

# Summary of trends

## Heroin

- Since late 2000 and 2001, heroin use has decreased dramatically in Australia.
- No change in intensity of use amongst users
- Australia's HIV rate remains very low

## Methamphetamine

- Declining rates of methamphetamine use in general population and in drug using sample
- No change in intensity of use

## Cocaine

- ??Cocaine use remains small in Australia: below 2% general population; but about 20% of injecting drug users used cocaine in the last six months

# Comparisons between Australia and other countries



# Cannabis use in 8 nations

<b>Country (age range)</b>	<b>Lifetime</b>	<b>Last Year</b>
USA (26-34)	56.7	19.9
Canada (25-34)	56.8	18.0
New Zealand (25-34)	62.0	18.0
France (15-34)	43.6	16.7
UK (15-34)	41.4	16.3
Netherlands (15-34)	32.3	9.5
Sweden (15-34)	19.1	4.8
Australia (20-29)	54.5	26.0

*Source:* Reuter and Trautmann (ed) A Report on Global Illicit Drug Markets 1998-2007. Various national household surveys. Year ca 2004

# Country Comparison – Ecstasy (last year use)

Country	Last yr use %
USA	1.0
Canada	1.3
UK	1.8
Netherlands	1.2
Germany	0.4
Italy	0.4
Australia	3.5



# Cannabis arrest rates for 7 countries, ca. 2005

	<b>Per 100,000 population</b>	<b>Per 1,000 users*</b>
Austria	333	44
Germany	237	34
US	269	31
France	225	26
UK	206	20
Netherlands	19	3
Australia	276	24

Source: The Global Cannabis Commission Report, September 2008

\*Users: estimated number of past year users from most current household survey

# Price of cannabis US dollars (ca. 2005)

Country	Price per gram
USA	12.30
Sweden	8.49
Canada	8.10
Germany	6.57
Italy	6.41
Switzerland	6.18
France	5.60
Netherlands	5.28
Spain	3.47
UK	3.36
Australia	15.26

Sources: EMCDDA, Caulkins et al. (2005).  
A Report on Global Illicit Drug Markets 1998-2007

# Price Comparison (US Dollars)

<b>Country</b>	<b>Heroin (price per gram) US\$</b>	<b>Cocaine US\$</b>
USA	\$171	\$94
Sweden	\$92	\$100
Germany	\$75	\$74
Italy	\$102	\$103
France	\$46	\$100
Netherlands	\$38	\$63
Spain	\$78	\$76
UK	\$71	\$86
Australia	\$310	\$277

Not adjusted for Purity. Source: World Drug Report 2008 c. 2006.

# Summary of Australian drug use and markets



## USE

- Drug use rates high (relative to other countries)
- Amongst users, mainly injectors (heroin, methamphetamine)
- No 'crack' & minimal cocaine and limited to Sydney but ? trending up
- Downward trends overall (2001 to 2007)

## SUPPLY

Importation of heroin

Importation of methamphetamines and local production

Seizure data difficult to interpret

Retail prices of all drugs high (and use high!)



# Conclusions

- Issues: polydrug use, substitutes and complements, purity data (matched to price data)
- All the above subject to large uncertainty
- What do we need to know? And with what level of precision?
- What would improved estimates tell us?
- How would improved estimates change:
  - Policy?
  - Practice?

# Further information



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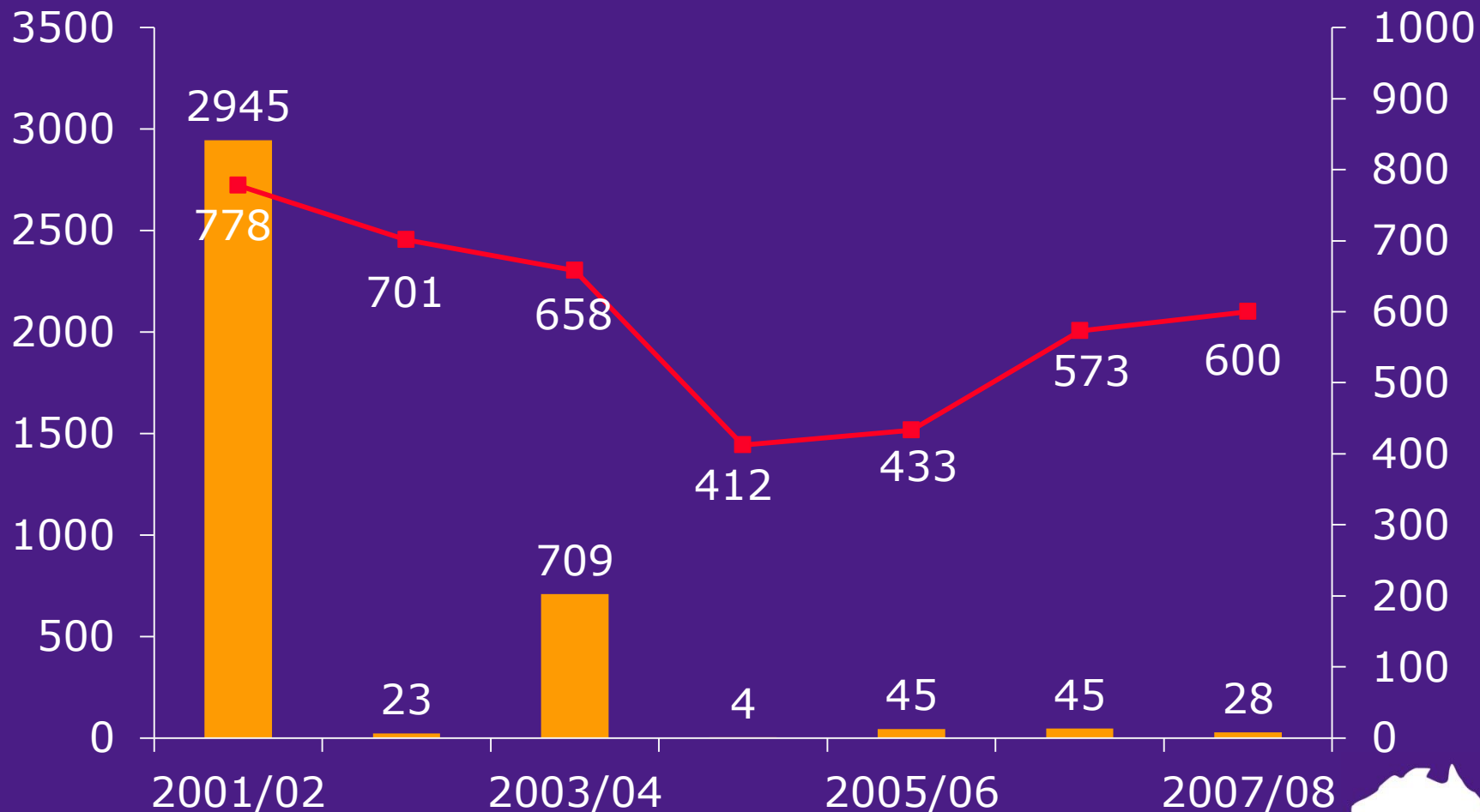
E: [alison.ritter@unsw.edu.au](mailto:alison.ritter@unsw.edu.au)  
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DPMP Website:

<http://www.dpmp.unsw.edu.au>

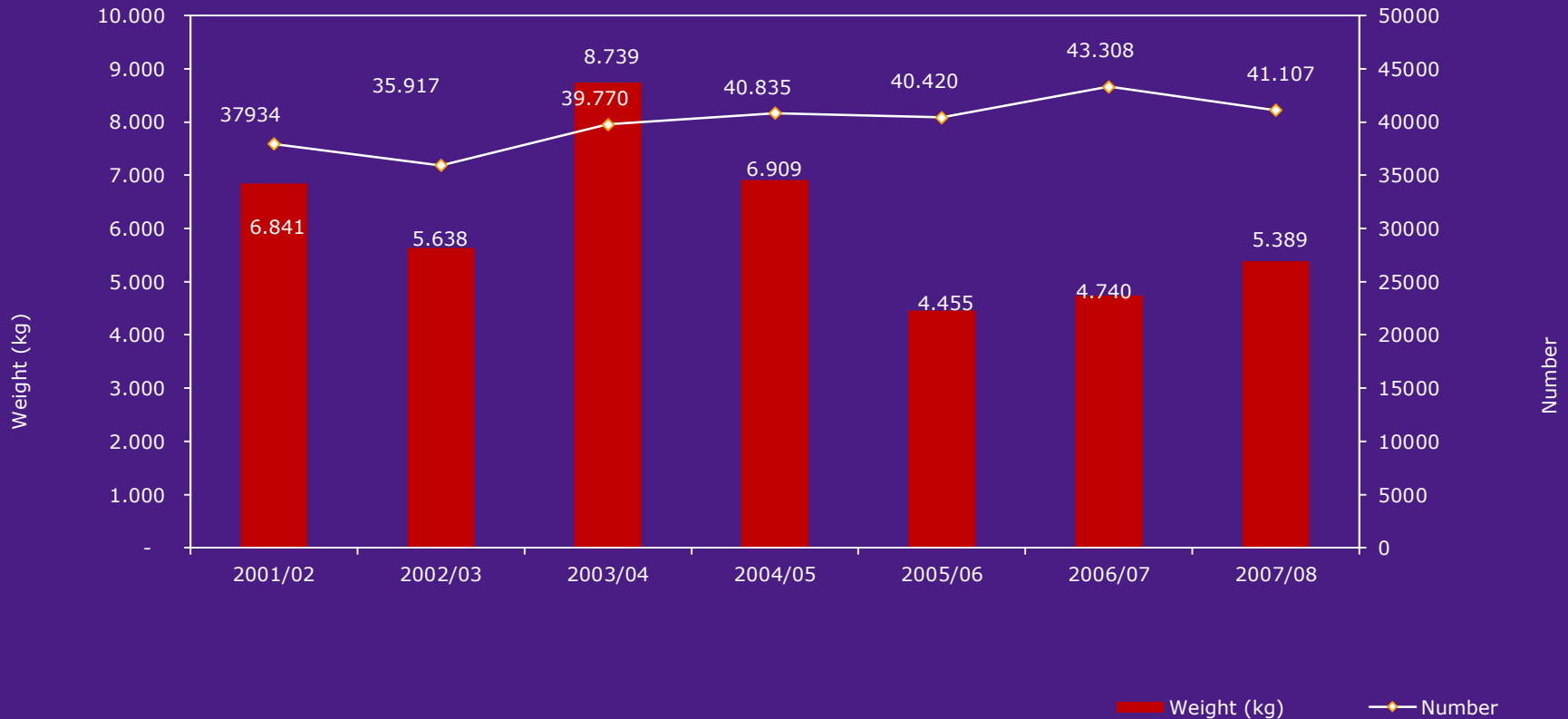


# Weight and number of detections of cannabis made at the border by the Australian Customs Service, 2001 to 2008



Source: Australian Custom Service

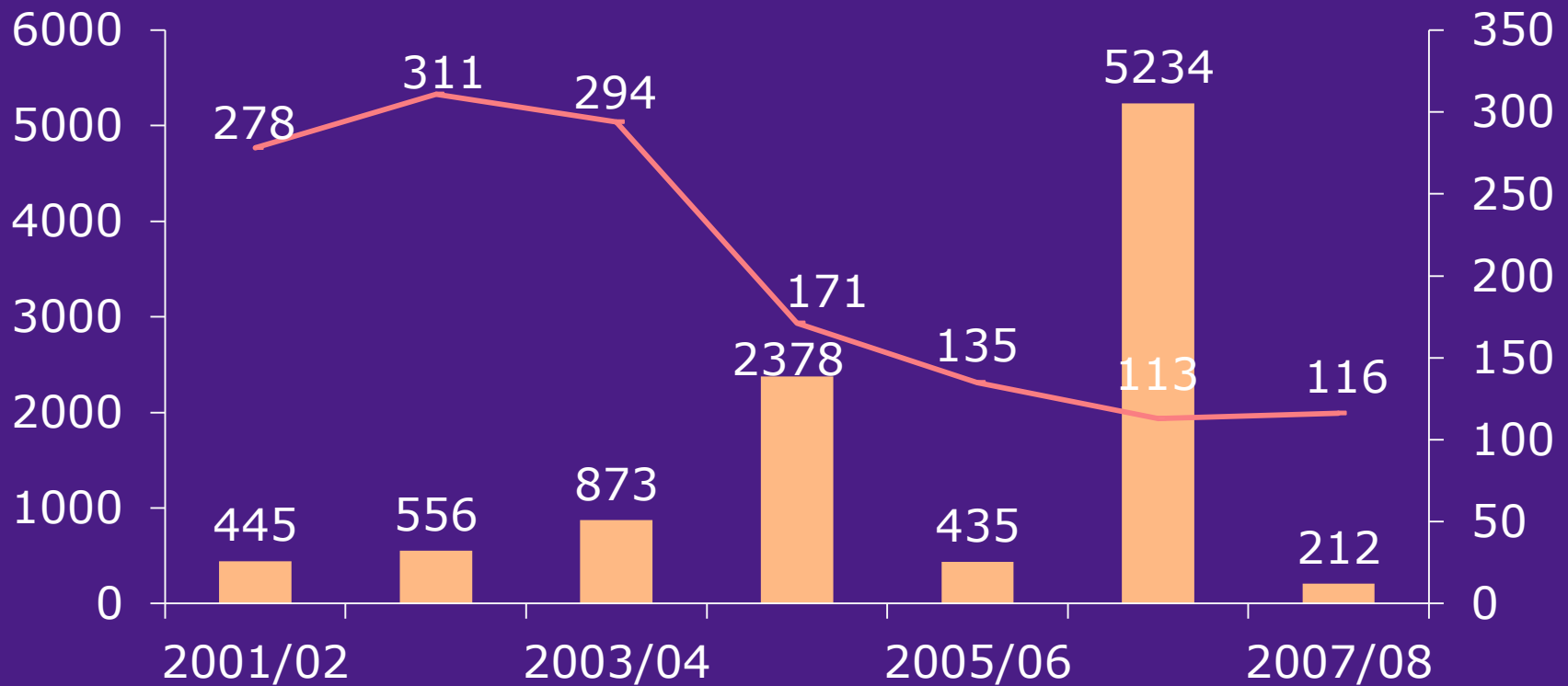
# Weight and number of domestic cannabis seizures made by State/Territory police, 2001 to 2008



Source: Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC



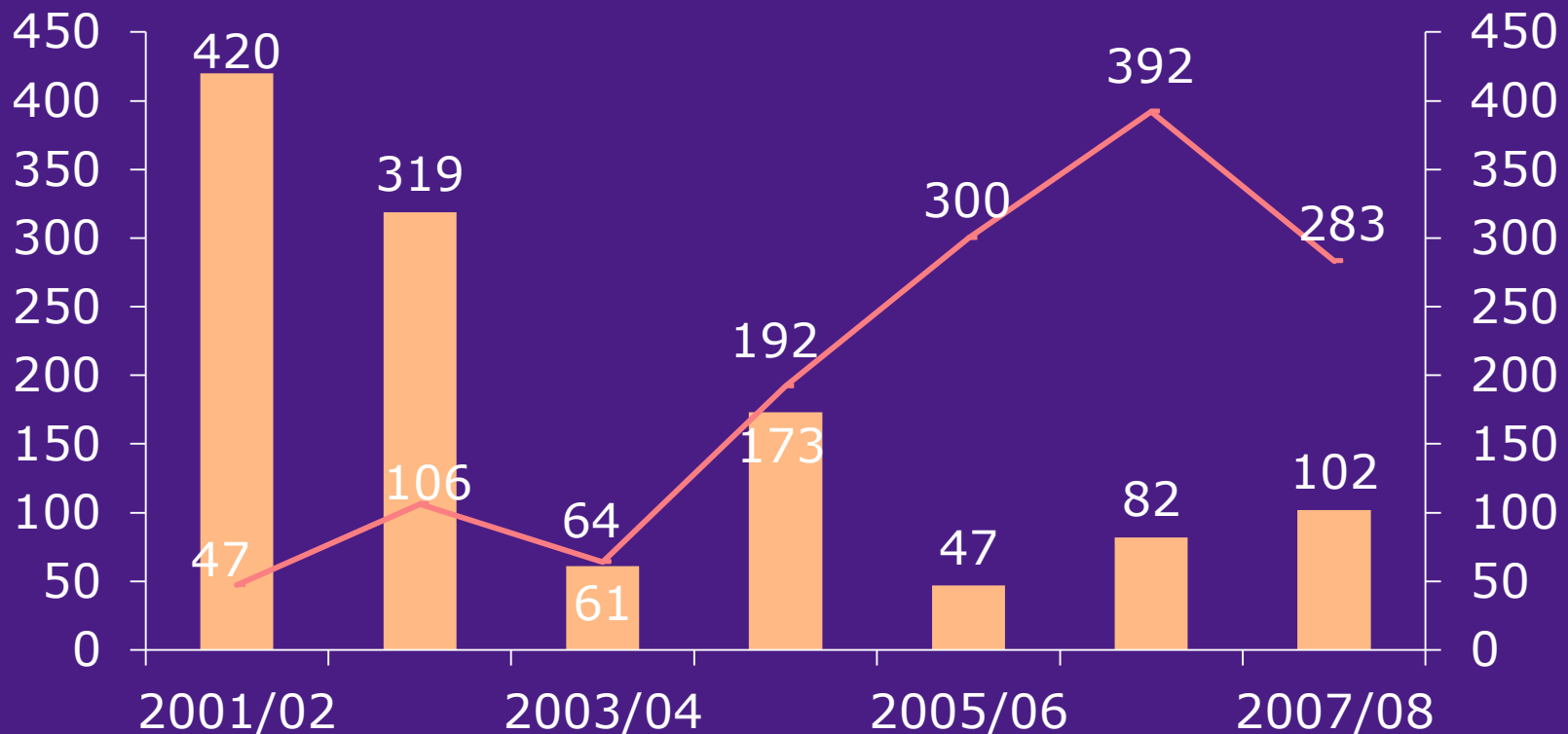
# Weight and number of detections of MDMA detected at the border by the Australian Customs Service, 2001-2008



Source: Australian Custom Service

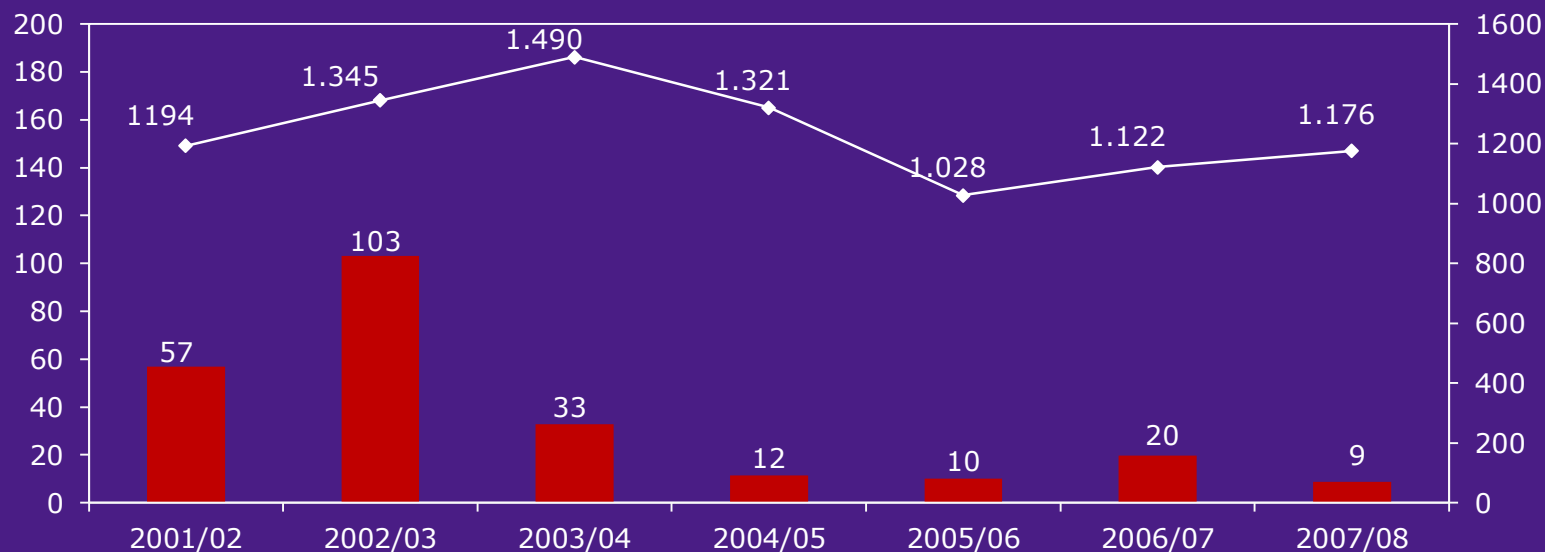
Weight Number

# Weight and number of detections of heroin made at the border by the Australian Customs Service, 2001 to 2008



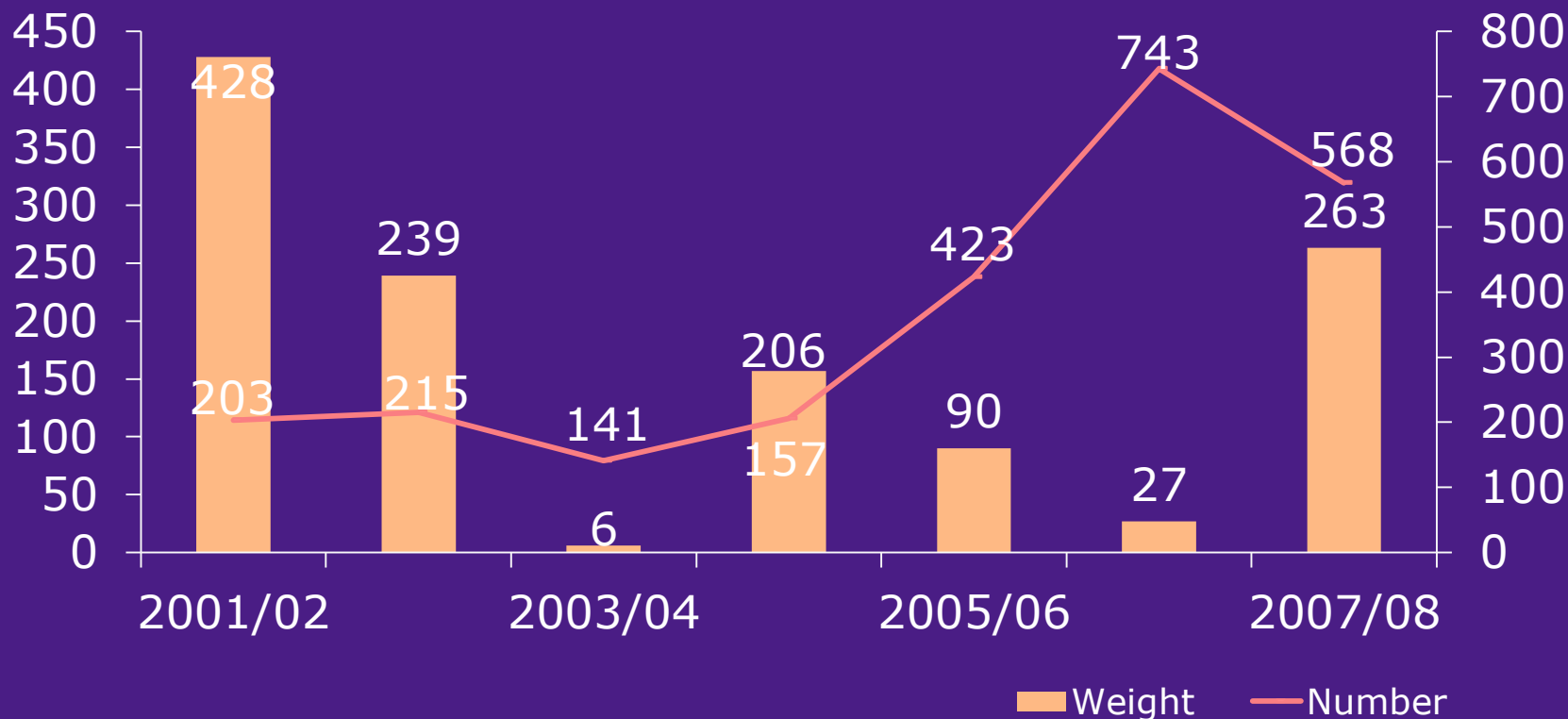
Source: Australian Custom Service

# Weight and number of total seizures of Heroin and other opioids made by State/Territory police, 2001 to 2008



**Source:** Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

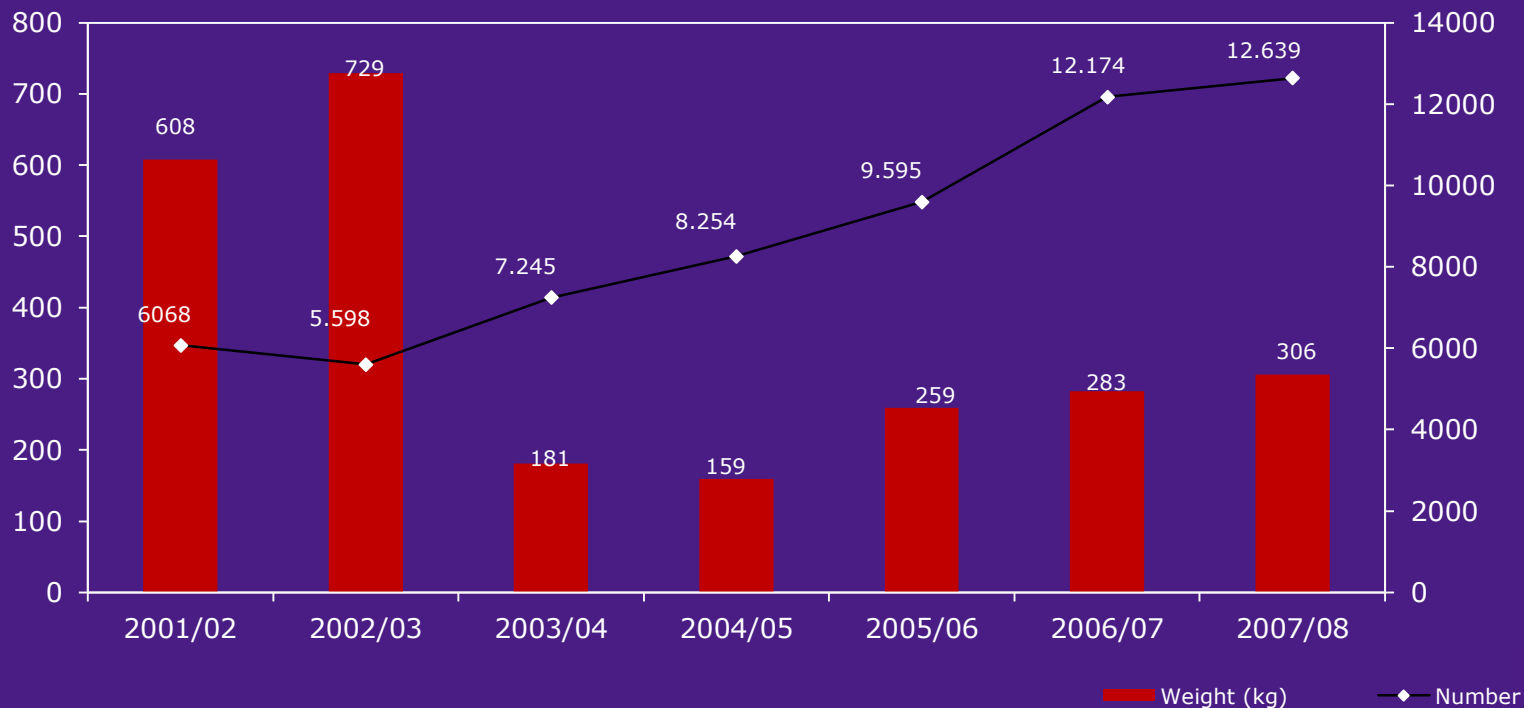
# Weight and number of amphetamines\* detected by the Australian Customs Service, 2001 to 2008



Source: Australian Custom Service

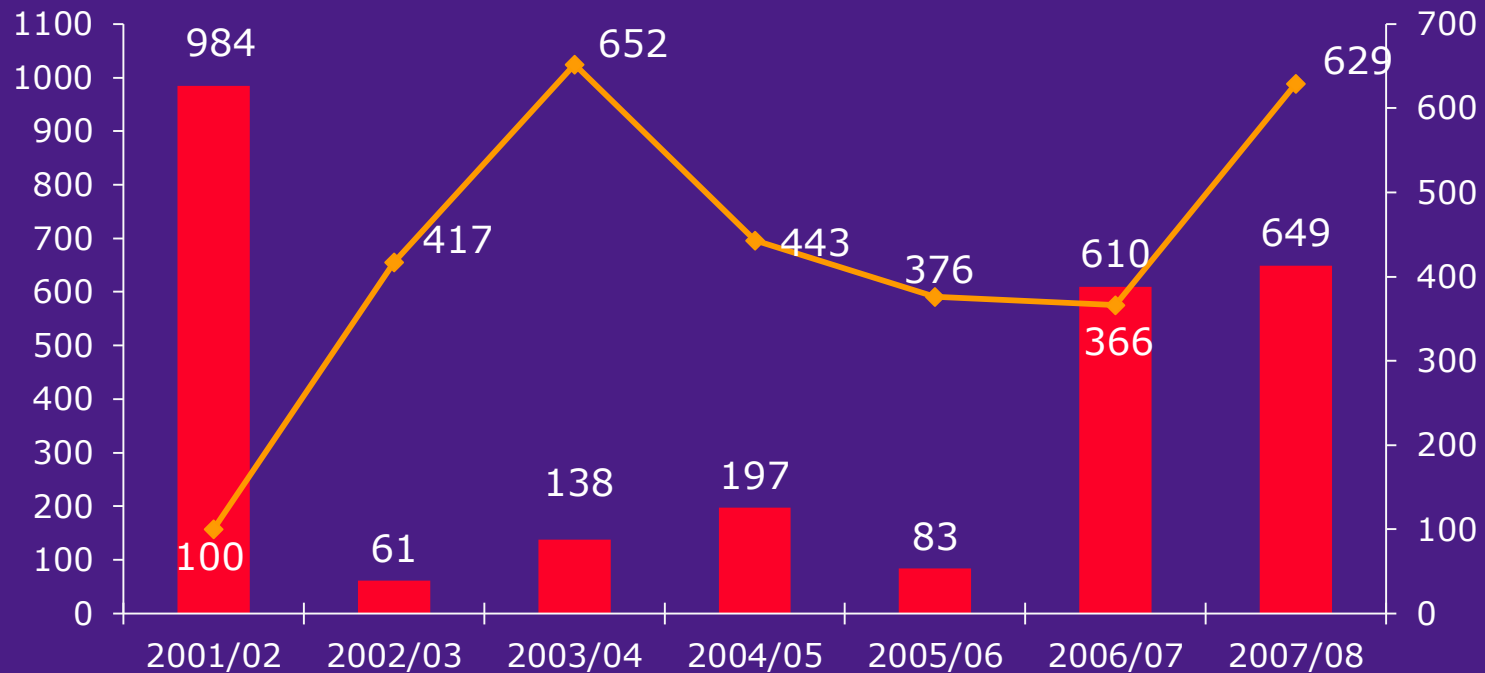
•Includes amphetamine detections, methamphetamine and methamphetamine (ice) detections, excludes MDMA

# Weight and number of domestic seizures of Amphetamine –type stimulants (including MDMA) made by State/Territory police, 2001 to 2008



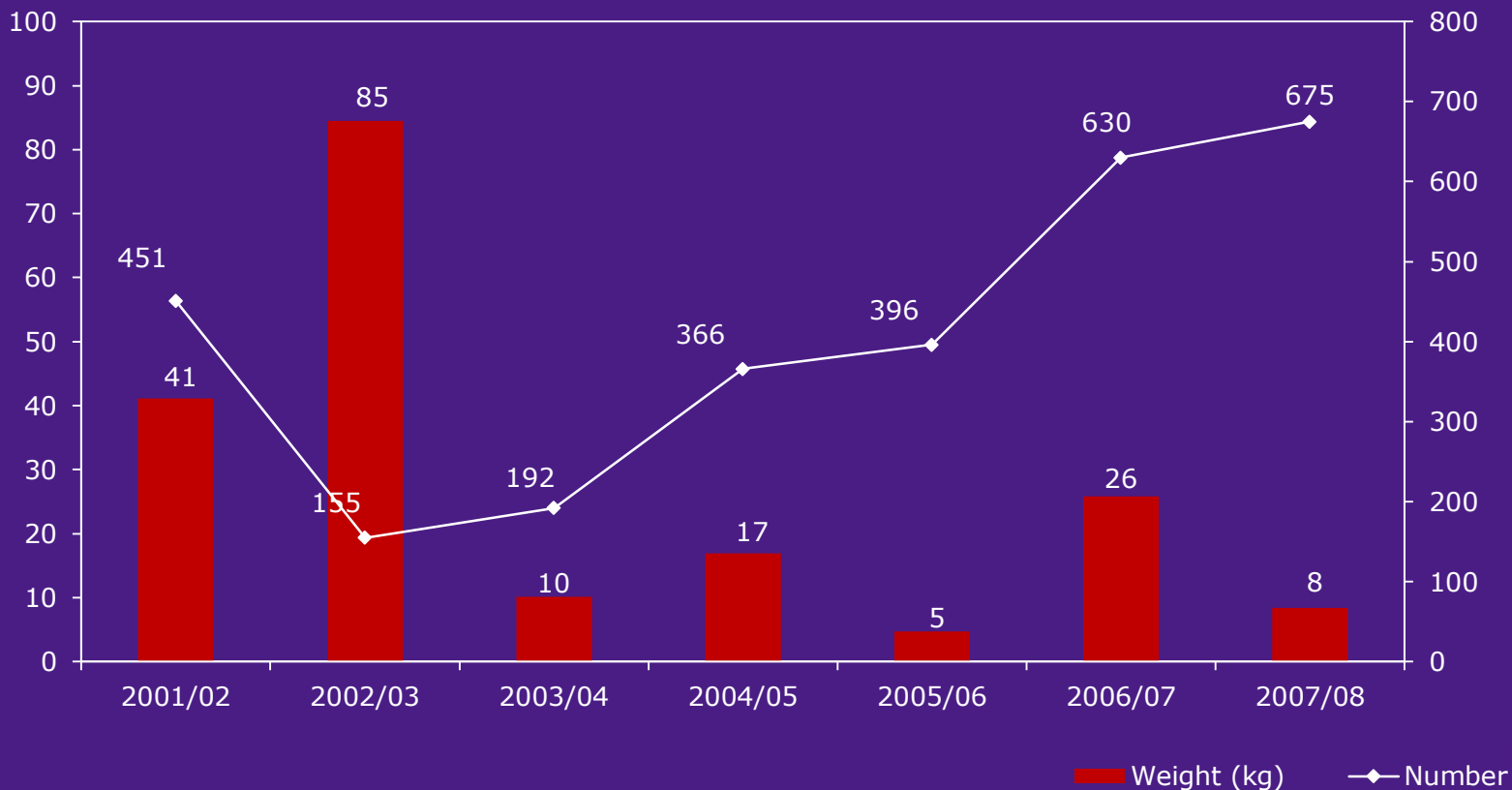
Source: Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

# Number and weight of detections of cocaine detected at the border by the Australian Customs Service, 1995/96 to 007/08



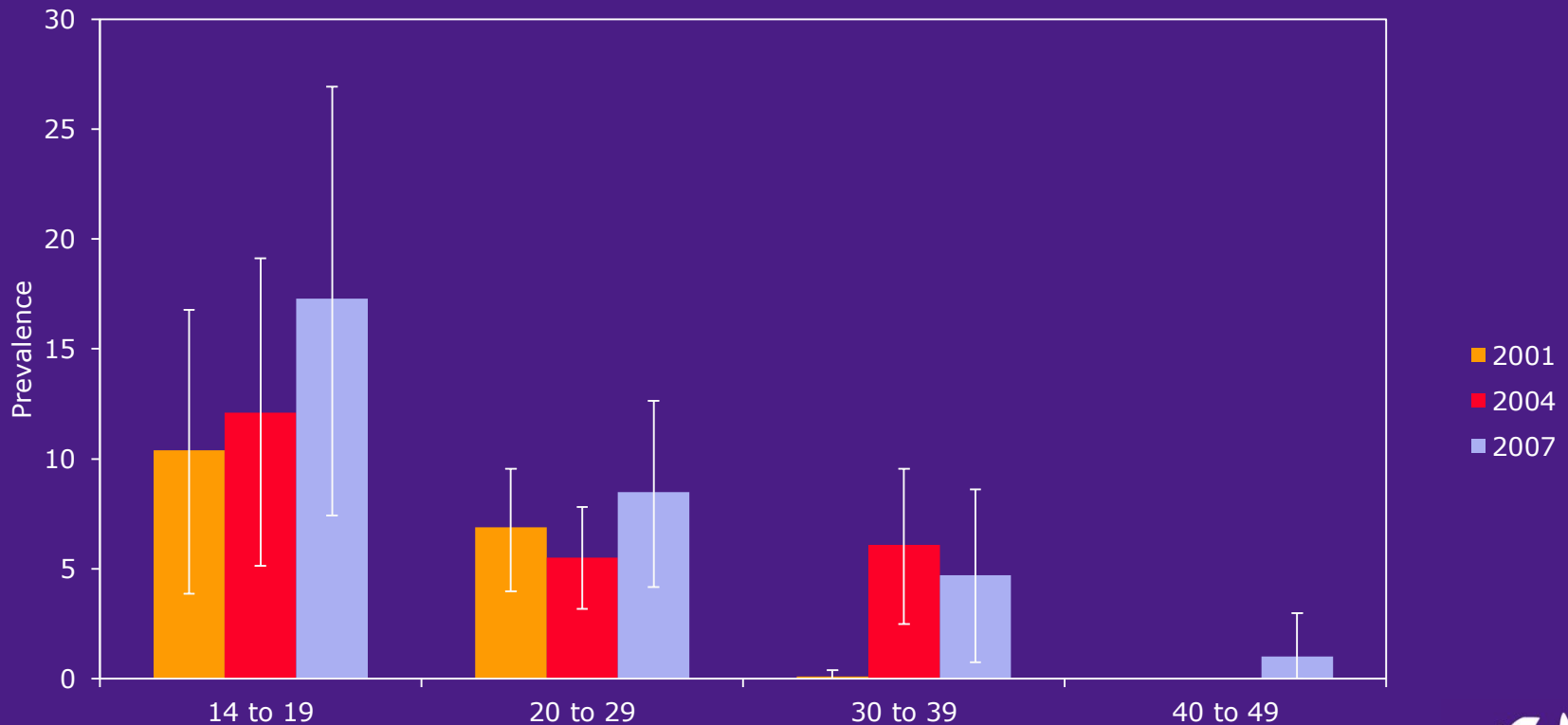
Source: Australian Customs Service, 2008

# Weight and number of total seizures of cocaine made by State/Territory police, 2002 to 2008



Source: Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

# Proportion of ecstasy users reporting weekly or more use in the past 12 months by age group, 2001 to 2007



Source: National Drug Strategy Household Surveys, AIHW