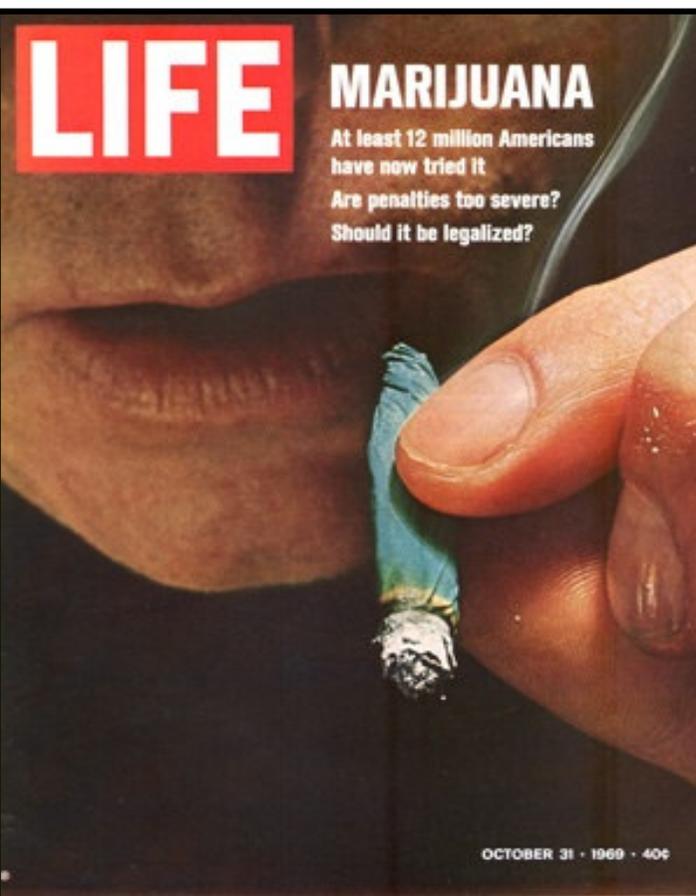


# Cannabis and residential treatment



**Professor Jan Copeland**

Director

# Overview

- Patterns of cannabis use, dependence & treatment
- Withdrawal management
- Non-residential settings: pharmacotherapies & CBT
- Treatment in a residential setting



# Cannabis and Australia

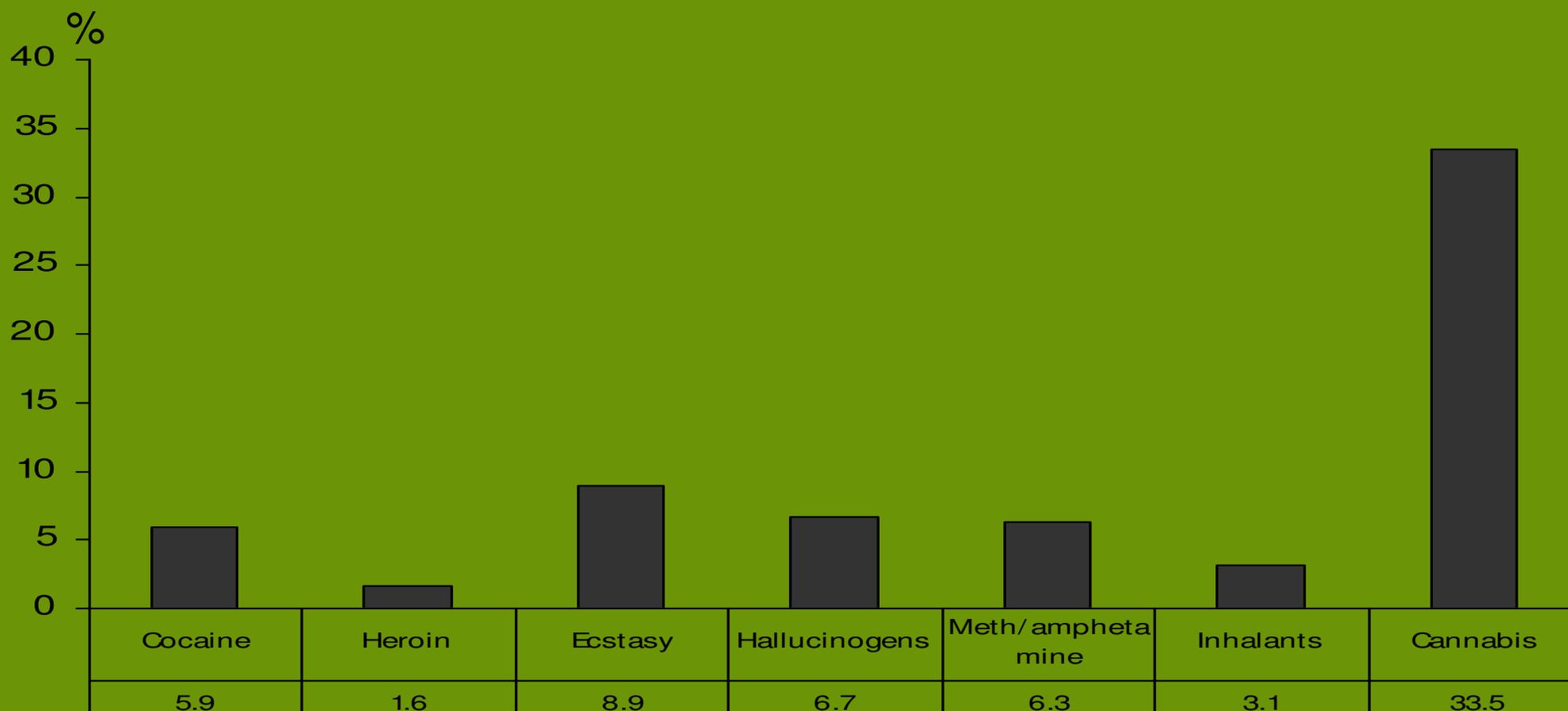
Cannabis remains the most widely used illicit substance in Australia

Approximately 5.8 million Australians aged 14 years and over have tried cannabis at least once during their lives, and 750,000+ have used cannabis in the past week with around 300,000+ smoking daily

There is a new and growing concern about cannabis use among some Indigenous communities.

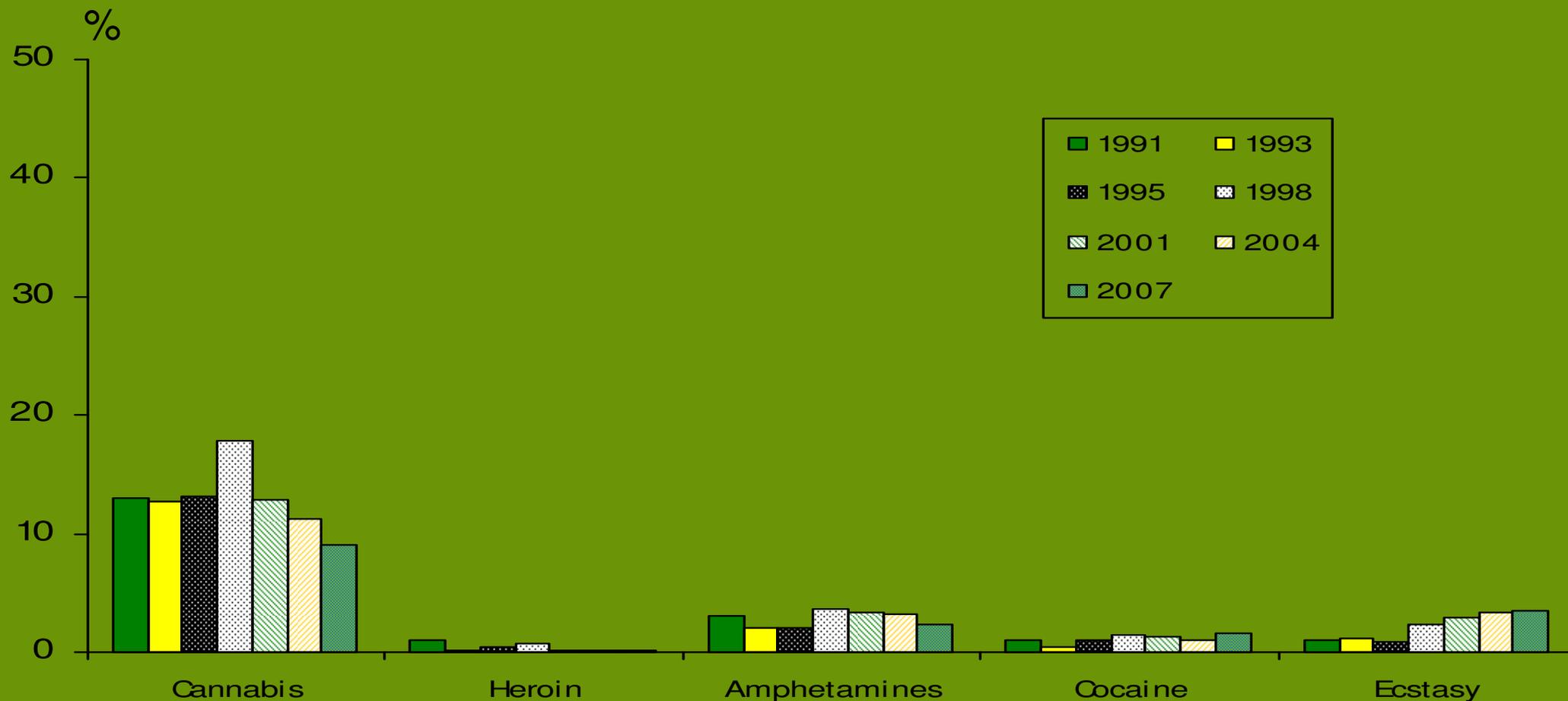
# Lifetime Illicit Drug Use: 14 years+

## 2007 National Drug Household Survey



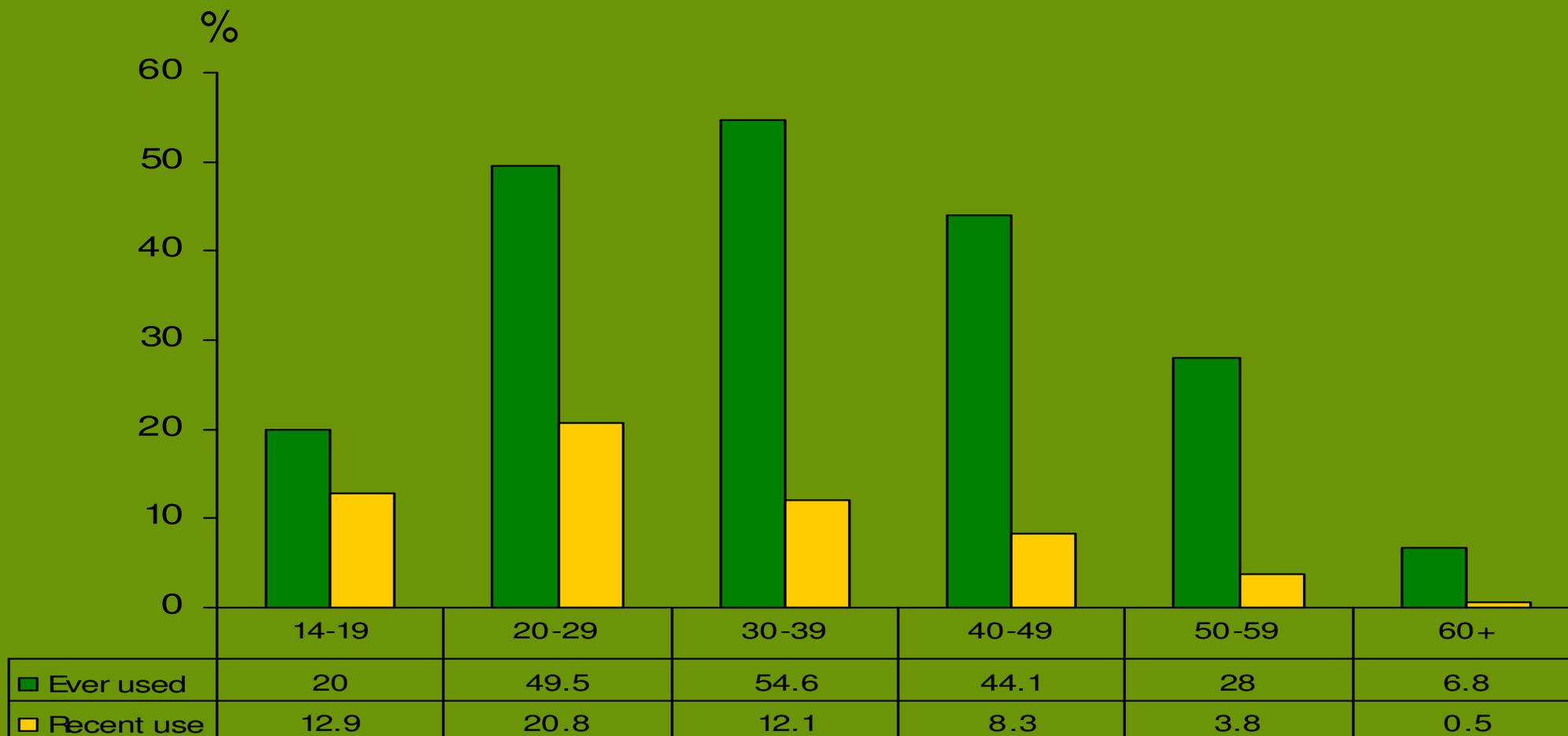
# Changes in recent drug use over time

## 2007 National Drug Household Survey



# Cannabis use across age groups

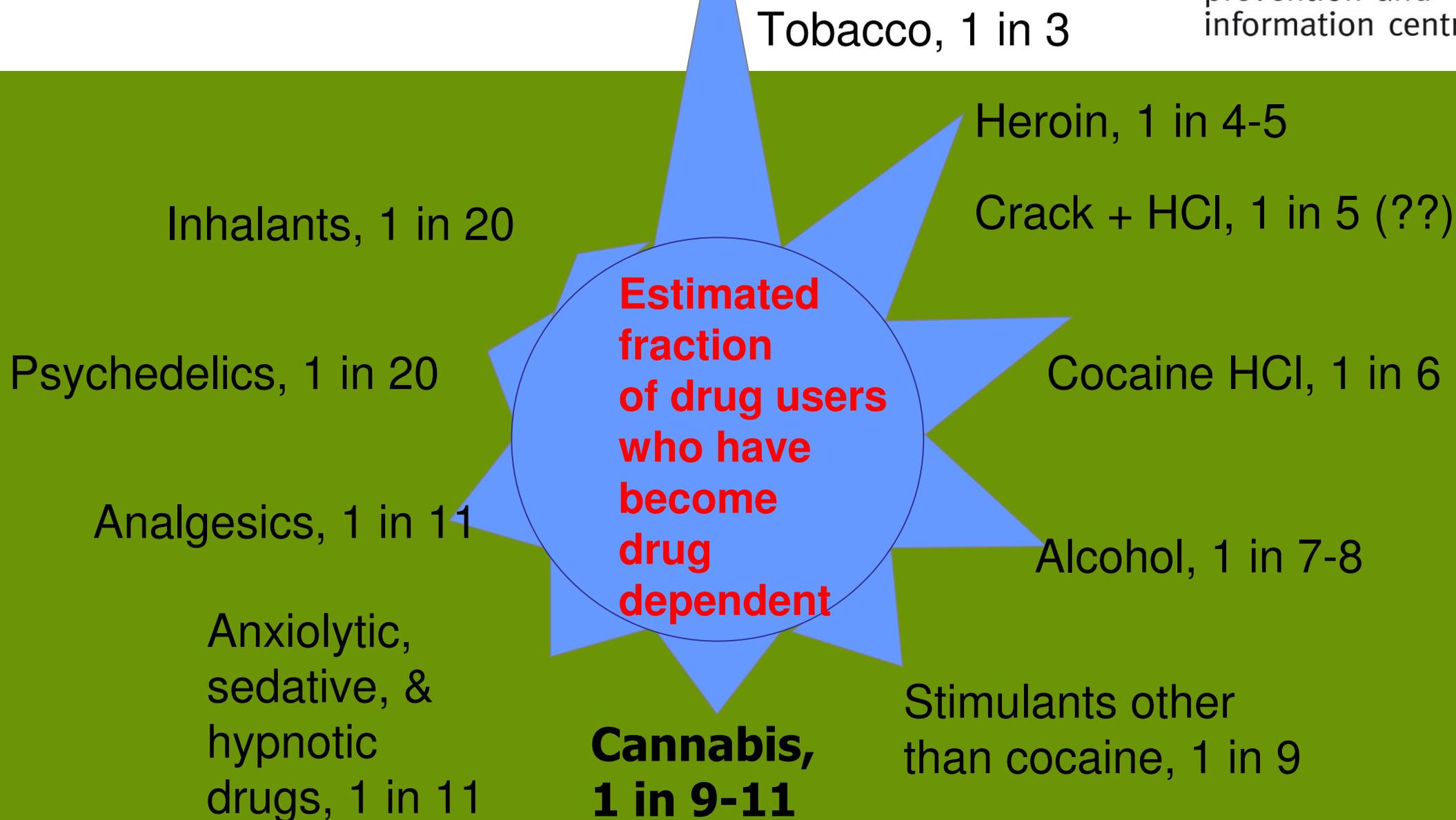
## 2007 National Drug Household Survey



# Comorbidity: drug use by people with psychosis

Substance	% General population	% People with psychosis	Factor of increase
Current tobacco	23	60	x 2.6
Daily alcohol	15	21.6	x 1.4
<b>Weekly cannabis</b>	<b>6.8</b>	<b>22.6</b>	<b>x 3.3</b>

# How many cannabis users develop cannabis dependence?



# Cannabis Use Disorders in Australia

-  7.1% had used cannabis >5 times that year
-  2.2% met criteria for DSM IV cannabis use disorder (1.5% for dependence)
-  31.7% of current users met criteria for DSM IV CUD (21% for dependence)
-  Those with cannabis dependence were x3 more likely to have seen a professional for mental health problems than those without

## Cannabis versus all other principal drugs, Australia 2005/06

	CANNABIS		OTHER DRUGS	
	n	%	n	%
<u>Sex</u>				
Males	24,884	69.8	99,243	65.6
Females	10,730	30.2	51,963	34.4
<u>Treatment type</u>				
Withdrawal management	4,939	13.9	25,828	17.1
Counselling	11,567	32.5	57,277	37.8
<b>Rehabilitation</b>	<b>1,935</b>	<b>5.4</b>	<b>11,331</b>	<b>7.5</b>
Information & education	8,642	24.3	14,655	9.7

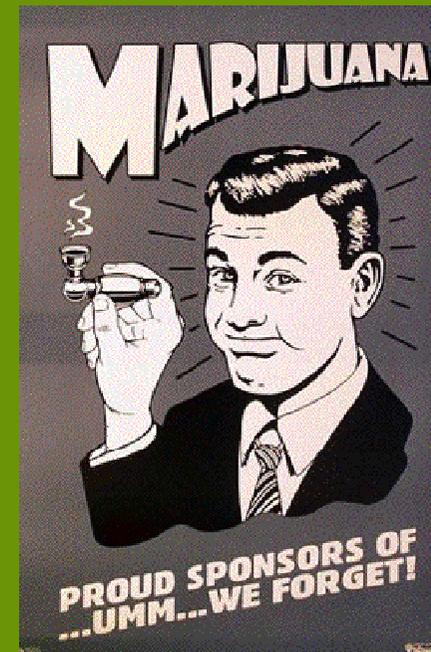
Source: Alcohol and Other Drug Treatment Services in Australia 2005-06 Drug Treatment Services. No. 7 AIHW Cat No HSE 53, 2007

## US Historical comparisons

- A sample of 753 admissions to TCs between 4-37% reported cannabis as the primary drug (Condelli & De Leon, 1993)
- Participants in a study of client matching in TCs: 11.3% - 11.5% of sample had cannabis as their primary drug (Melnick, De Leon, Thomas & Kressel 2001)

## Residential cannabis treatment 2005/06

- ▶ Among clients aged 10-19 cannabis was the most common principal drug of concern (50%)
- ▶ 46% of clients had cannabis as a drug of concern (25% as principal)
- ▶ The average age of the cannabis clients was 24 years compared with 29 years for heroin
- ▶ There were more cannabis than heroin clients receiving residential rehabilitation in 2005/6 (1, 935 versus 1, 781)



# Interventions

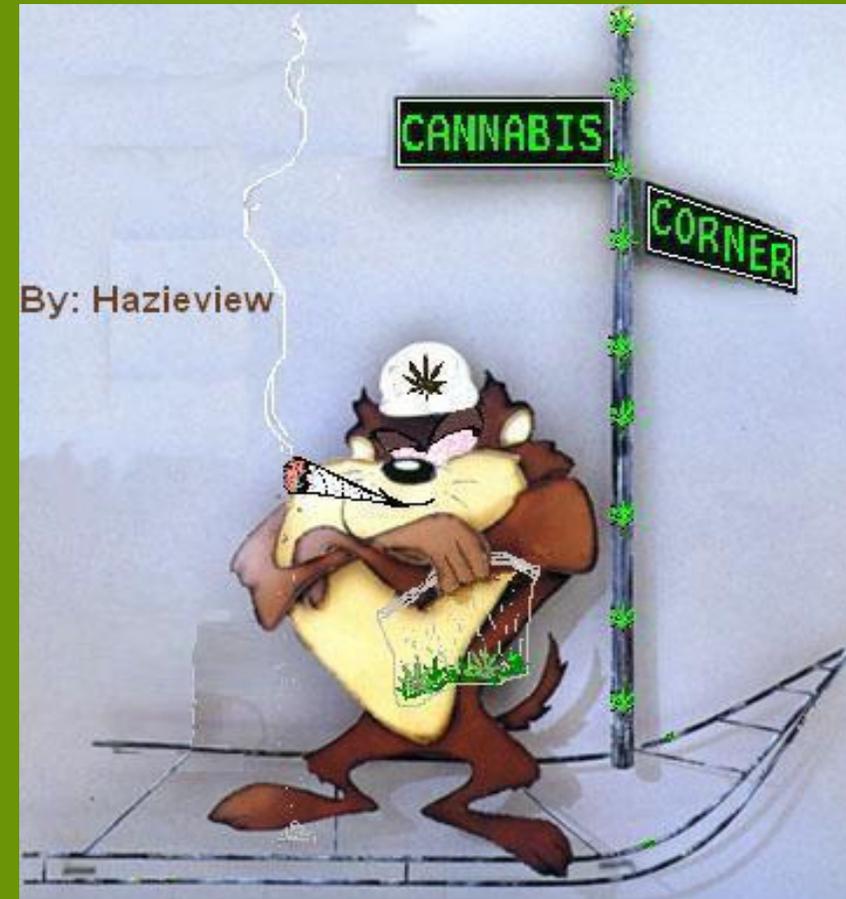
- Withdrawal management
- CBT
- Pharmacotherapies
- Residential settings

## Withdrawal management: common symptoms

- Anger, aggression, irritability
- Anxiety/nervousness
- Decreased appetite
- Restlessness
- Sleep difficulties including strange dreams

### Less common symptoms

- Chills
- Depressed mood
- Stomach pain/physical discomfort
- Shakiness
- Sweating (at night)



# Withdrawal management

Not coded in DSM-IV TR

- The proportion of patients reporting cannabis withdrawal in recent treatment studies has ranged from 50-95%
- The majority of symptoms commence on day 1, peaking at day 2-3. Late onset aggression (D4) and anger (D6) are often seen with the latter peaking at 2 weeks post abstinence. Strange dreams are typically the most common persistent symptom as slow wave sleep returns to normal.

# Withdrawal management

The majority of cannabis withdrawal can be managed in the community with usual care of education, CBT and social support

Clinical indications for inpatient management include failed community withdrawal, significant SUD co-morbidity, history of aggression during withdrawal, history of exacerbation of schizophrenia or BPAD during withdrawal

## Intervention options: ME & Cognitive-Behavioural Therapy



“There is nothing either good or bad,  
but thinking makes it so“  
William Shakespeare’s “Hamlet”

## Intervention options: ME & Cognitive-Behavioural Therapy

- US and Australian studies confirm that 1-9 sessions of CBT are the most effective – these include case management, coping with urges and handling triggers, challenging positive expectancies, coping skills training and relapse prevention delivered within a motivational interview style
- Incentive-based vouchers increase the effectiveness of CBT (contingency management)

## Pharmacological Interventions

- The identification and cloning of cannabinoid receptors (CB1 & CB2)
- Developed cannabinoid agonists and antagonists (SR 141716A aka Rimonabant)
- New insights into the neurobiological underpinnings of the psychoactive effects and dependence processes associated with the use of cannabis



## Medications examined to date:

Bupropion

Nefazodone

Oral THC

Divalproex sodium

Lithium carbonate

Buspirone

Oral THC

Lithium carbonate

Mirtazapine

Gabapentin

# Pharmacological Interventions

## Antagonists

CB1 selective cannabinoid receptor antagonist SR141716A(Rimonabant):

- blocks the acute psychological & physiological effects of cannabis
- may be useful with highly motivated clients but not yet trialled for this use

# Pharmacological Interventions

## Agonists

First study in treatment seekers has shown that 90mg daily dose (given as 30mg tds) abolished withdrawal symptoms with a dose response effect. A number of clinical studies underway

# Summary

## Medication

## Evidence

Lithium carbonate

Early/promising

Oral THC

Early/promising

Gabapentin

Early/promising

Bupropion

Minimal

Mirtazapine

Minimal

Nefazodone

Minimal

Divalproex sodium

No

Bupropion

No in withdrawal ? relapse prevention

## TC setting

- No studies focussing on cannabis treatment outcomes in TCs but they do not appear to be significantly different to other drugs of concern
- The fundamental tenets of TCs such as cognitive strategies and contingency management (non-monetary) can be built upon with combined CBT in the re-entry phase

# Adolescent setting

- Analyses of administrative data from the Ted Noffs Foundation on 1254 admissions to PALM between January 2001 and June 2007 reported that:
  - Those who present with cannabis use problems are younger and more likely to be male
  - They are also more likely to seek treatment in rural settings than are psychostimulant- or opioid-using peers

## Adolescents in residential treatment

- The mental health of young people presenting with cannabis problems is as poor as that of primary psychostimulant users, and poorer than that of primary alcohol or opioid users
- Cannabis-using young people presenting to residential treatment are less criminally involved
- The young people with cannabis as a principal drug of concern were retained in treatment longer
- Treatment outcome not yet reported

# Overview

- For a small proportion of cannabis users inpatient withdrawal and residential treatment will be indicated
- TCs are more about the person than the drug *per se* so there is no reason why cannabis users with chronic and complex problems would not equally benefit

# NCTIC

## Some current relevant projects/activities:

- ❑ Barriers to cannabis treatment
- ❑ Guidelines for clinicians



- ❑ Free national Cannabis Information and Helpline  
1800 304050
- ❑ Free national resources and workforce training
- ❑ Web based and postal intervention trial

Please visit our website for press releases,  
cannabis information and research findings,  
resources, surveys and soon brief  
interventions

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