

**Experience of the opiate
maintenance treatments (OMT)
in Finland: relations to diversion
and public health**

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Introduction to Finland

- Population 5.3 million
- EU member
- Average gross national product (GNP) in 2006 €31.886
- High-standard and well-developed public and private healthcare



Drugs in Finland

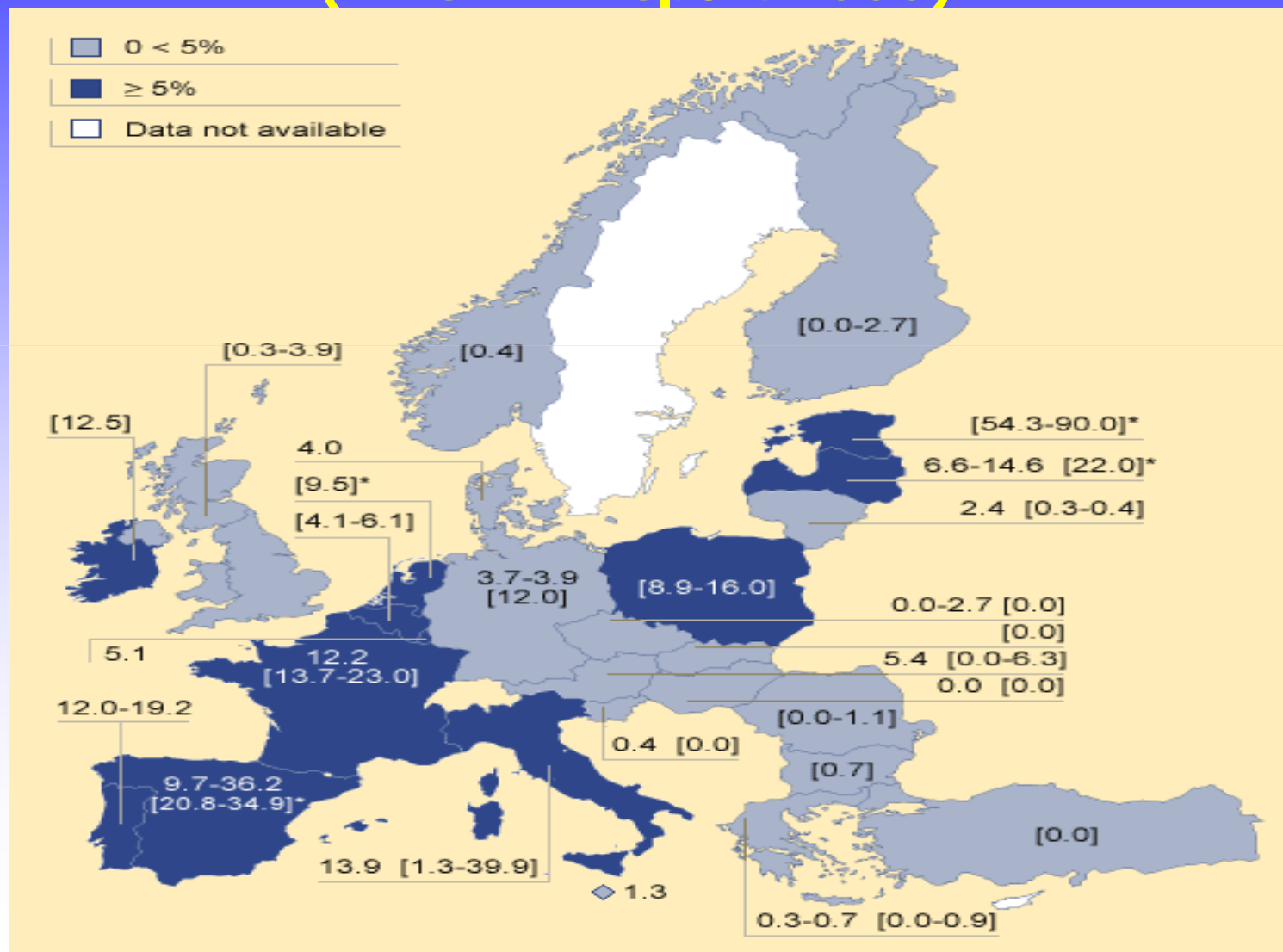
- Most frequently misused drug: cannabis
 - Less than 5% report to be frequent users
 - 12% of the population has tried cannabis at least once
- Most frequently misused intravenous drugs: amphetamines and opioids
 - Survey in 2000: ~16,000–21,000 IV drug users
 - prevalence of IV drug use is: 0.6–0.7%
 - » in the capital Helsinki 0.9–1.3%
 - < 50 % (10,000) are opioid **users, mainly heroin**

Public Health: drug-related public expenditure

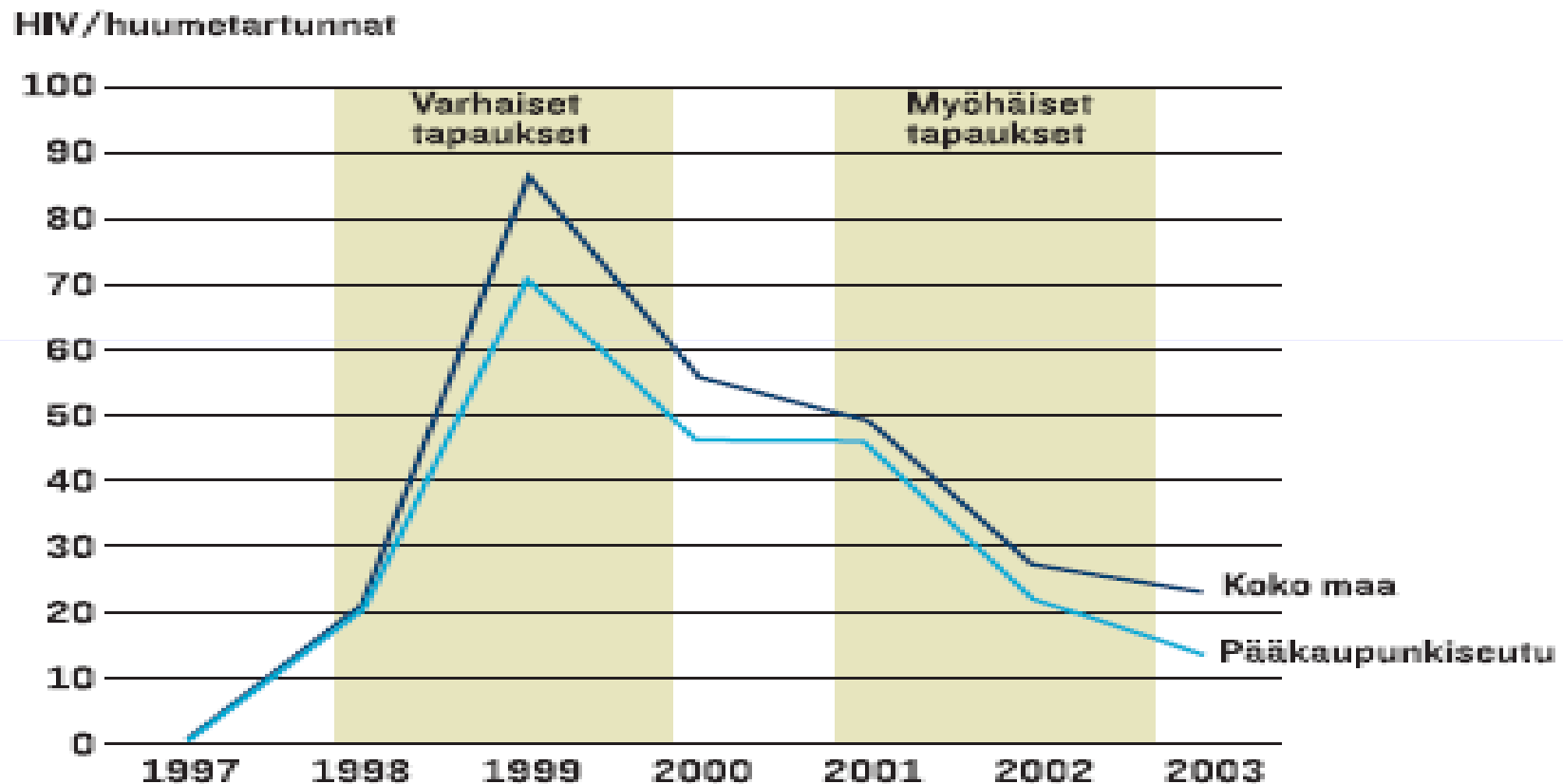
- There is no common definition of drug-related public expenditure
- It is estimated that drug policy expenditure during 2002 was around 0.8 billion euros, comparing with figures for 1991 shows that expenditure has increased substantially
- Countries reporting drugs expenditure for the year 2004 included the Czech Republic (11.0 million euros), Spain (302 to 325 million euros), Cyprus (2.8 million euros), Poland (51 million euros) and Norway (46 million euros), Luxembourg (6 million euros in 2005) and the United Kingdom (2 billion euros in 2004)
- Source EMCDDA report 2006

HIV prevalence in tested injecting drug users, 2003–04

(EMCDDA report 2006)



Incidence of new HIV infections among IDUs



Since 1998 **health counseling and needle exchange** centers and in 2000 OMTs for drug users have been expanded throughout the country

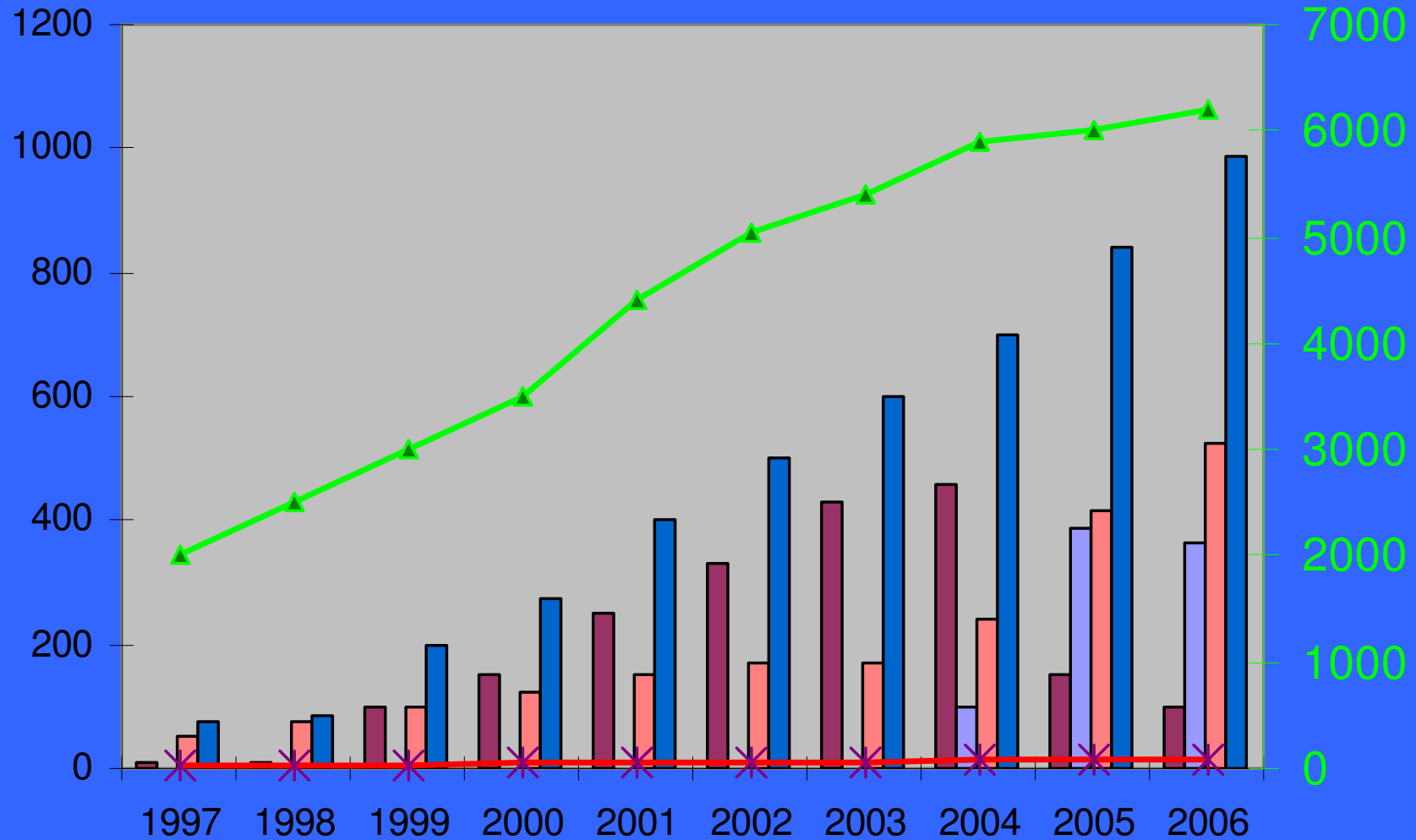
Opioid Maintenance Treatment (OMT)

- Methadone and buprenorphine
- OMT is regulated currently by SHM decrees
 - Controlled and regimented treatments
 - All treatments initiated in specialised centers
 - No prescription, no pharmacy distribution of buprenorphine or methadone
 - In stabilised patients "take away" dosing allowed
 - Maintenance possible at specialized clinics (A-Clinics) if trained personnel

OMT in Finland

- In 1996, methadone treatment initiated
 - Regulated, not covered
 - In 2000, governance, framework
- In 1992??, “private” buprenorphine patients
 - NO governance, NO framework
- In 2000, Subutex[®] registered for maintenance programmes
 - Governance, framework, regulated, not covered
- In late 2003, Suboxone[®] available under a pre-license
 - Governance, framework, regulated, not covered

Demand of treatment



Subutex

Suboxone

Metad

Total

Estim Opi Dep Pers

in OMT %

Current OMT situation

- **In 2007, approximately 1126 patients in MT: 458 Suboxone , 145 Subutex and 523 methadone**
- Estimation: approximately 13 % of opiate dependent persons in treatment programs
 - 6-10 months waiting list for maintenance treatment of opioid-dependency

Current treatment settings and practice on buprenorphine maintenance treatment in Finland (Helsinki area)

- The treatment evaluation and initiation mainly at University Hospital HUS
- Average daily initiation dose 4+4 mg
 - Mainly Suboxone, pregnant/lactating with Subutex
- Second day 10-16 mg, current average daily dose 16 mg
- After initiation week(s) patients transferred to specialized treatment centers (A-Clinics)

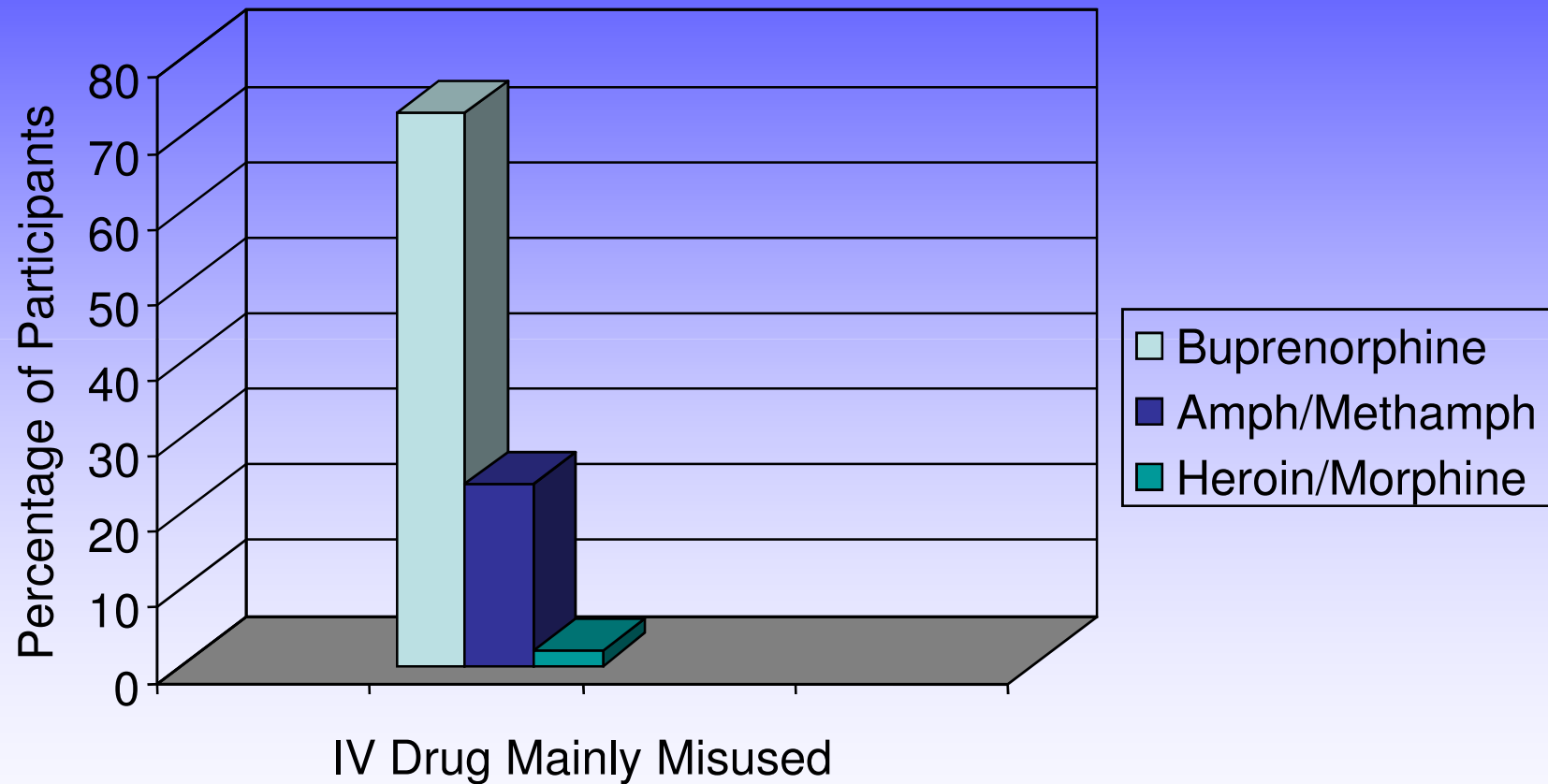
Current practice..

- Daily supervised dosing + occupational and/or CB therapy, weekly urine testing
- On stabilized patients take a way (TAW) dosing (weekend) allowed after 2-3 months
 - Gradual increase of TAW, after one year once a week dosing possible
- Dosing on alternate days (32 mg) with very few patients
- After one year of treatment in well stabilized patients the first discussions of withdrawal initiated
 - Long process, 15-20 % successful withdrawn

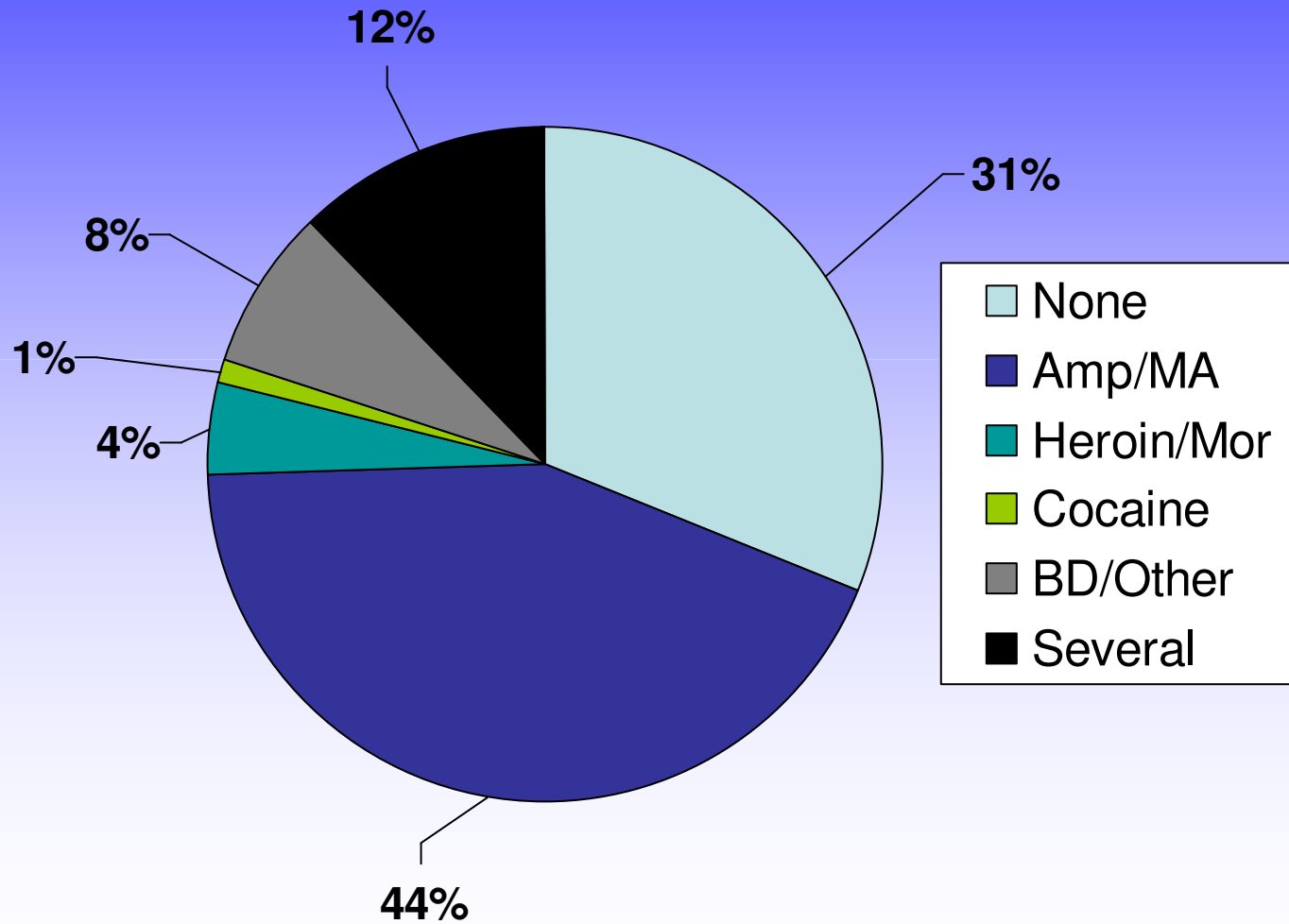
Abuse Liability Of Buprenorphine/Naloxone Tablets In Untreated IV Drug Users

- Data from survey at needle exchange centres in metropolitan Helsinki
(Alho *et al*, Drug Alcohol Depend, 2007)
 - 586 participants (30% return rate)
 - Questions asked:
 - What drugs am I using, frequency of usage etc?
 - Why am I using IV Subutex?
 - Experience of Suboxone IV usage?
 - Street value of Subutex and Suboxone?

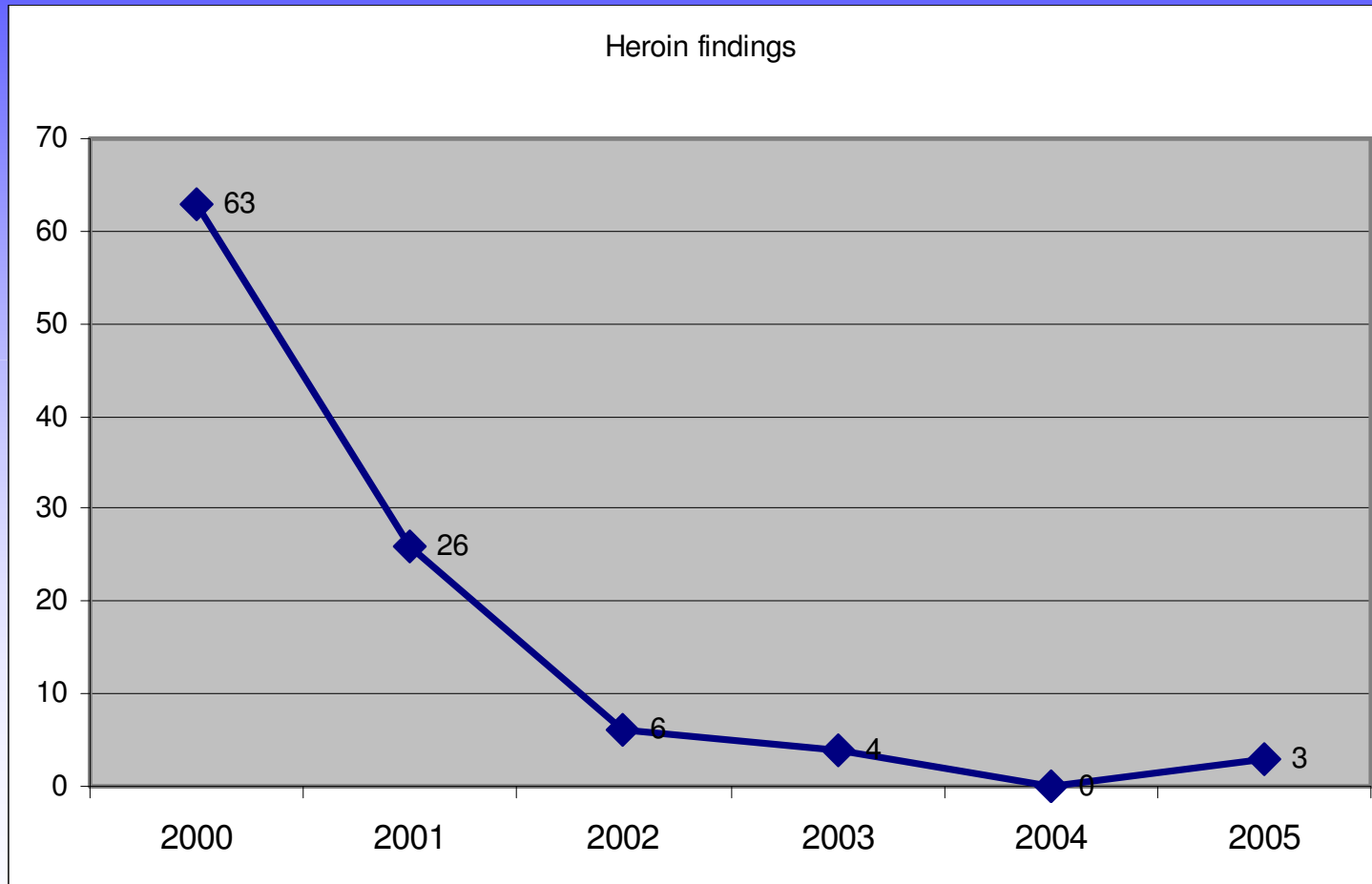
Most Frequently Used IV Drug



IV Drugs Used In Addition To Buprenorphine

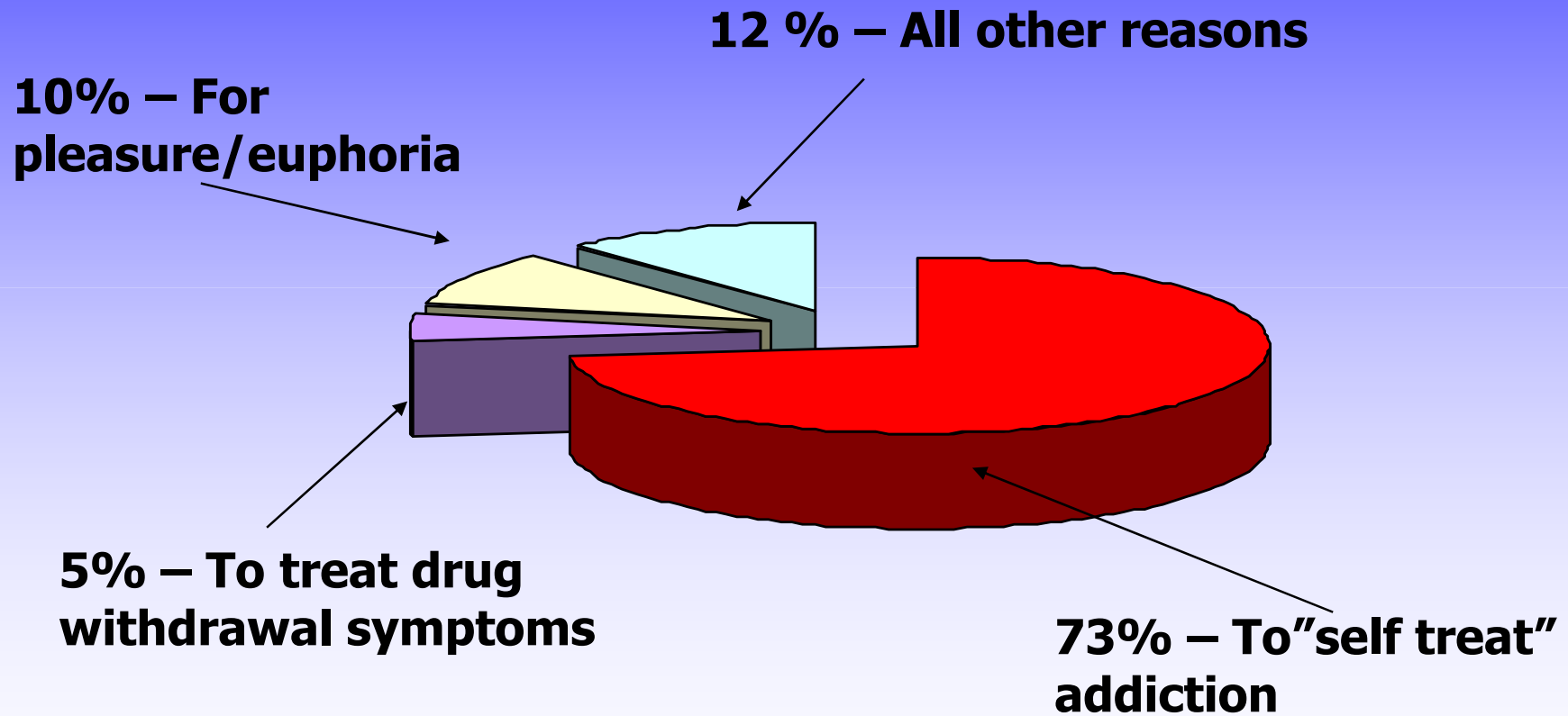


Heroin findings in the medico legal cause of death investigation in Finland 2000-2005



Alho et al, Duodecim 2007

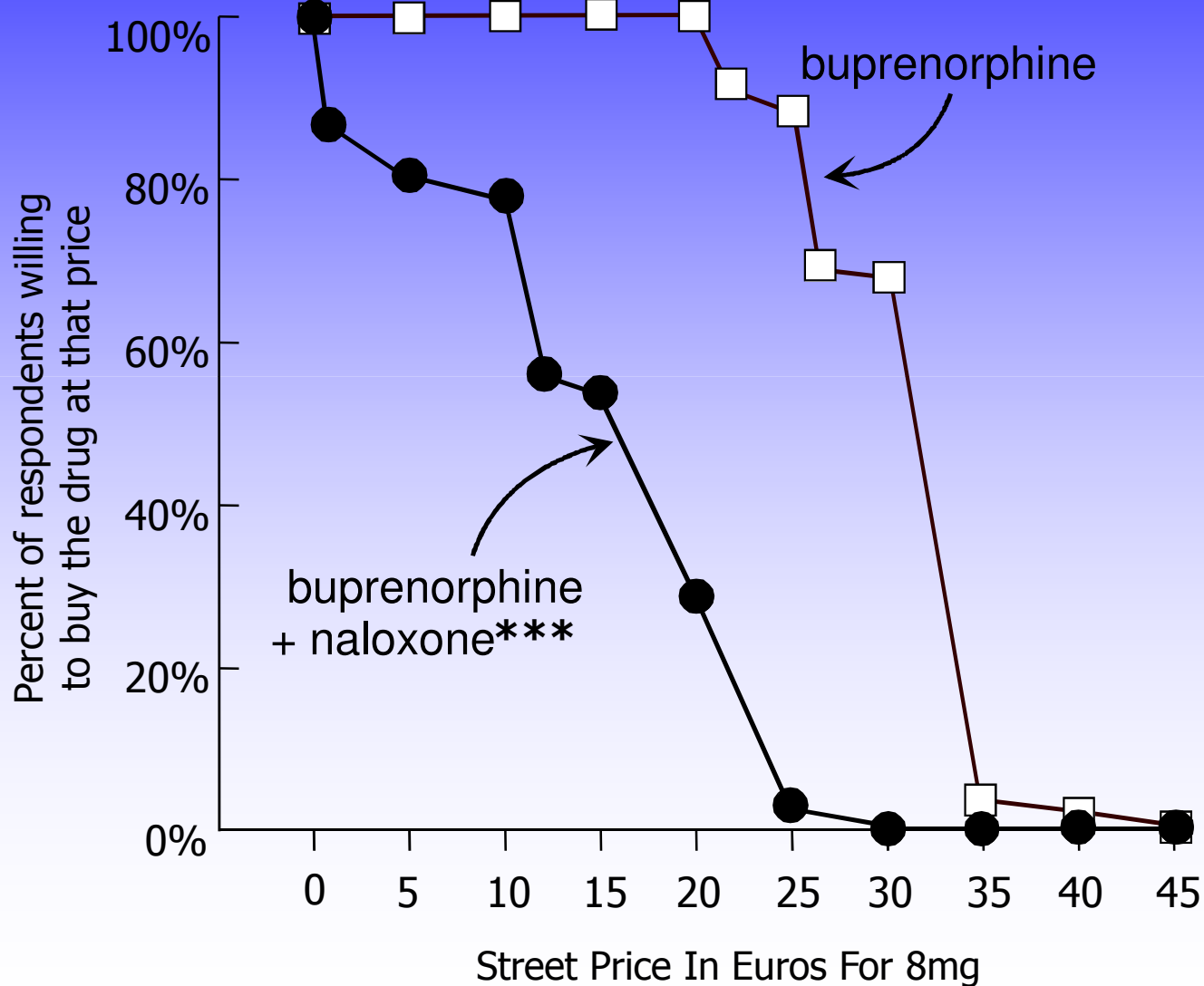
Reasons For Use Of IV Buprenorphine



Subjective experience with IV Suboxone

- **85 %** report trying IV Suboxone at least once
- **80%** report their experience with use of IV Suboxone was a **bad experience**
- **20%** report their experience with use of IV Suboxone is **no different than IV Subutex**
- **20 %** report using it more than once

Subutex And Suboxone Street Value % Willing To Pay € For 8mg Tablet



Subutex And Suboxone Street Value

- Subutex: average of €28 for 8 mg tablet
 - Daily IV dose: 14 mg
 - Average daily cost: €49
- Suboxone: average of €12 for 8 mg tablet (€0–25 / 8 mg)
 - Average daily dose? daily cost?
- Daily cost of other frequently misused drugs:
 - Heroin €80–120
 - Amphetamine €40–50

Study Conclusions

- Currently, the most frequently used IV opiate in Finland is buprenorphine (70%)
- Most frequent reason for IV use is 'self treatment of addiction'
 - Limited access to treatment?
- The street value of Suboxone is \sim 57% less than that of Subutex

**STUDY II: Efficacy And Safety Of
Buprenorphine/Naloxone Combination In
Persons With Opiate Dependency (in submission
2007)**

Because of the high illicit use of buprenorphine in Finland almost all treatment centres decided to transfer the patients to Suboxone in late 2004, "forced transfer from Subutex to Suboxone"

Maintenance Dose (Weeks 1–4)

- 72% of patients were maintained **at the same dose** of Suboxone throughout the 4-week study period
- 83% of patients were treated with only Suboxone throughout the 4-week study period

	n (%)
Stayed At Same Dose Of Suboxone Throughout 4-Week Study Period	46 (71.9)
Treated With Only Suboxone Throughout 4-Week Study Period	53 (82.8)
Dose Reduction	4 (6.3)
Dose Increase	1 (1.6)
Temporary Dose Change	2 (3.1)
Discontinued Treatment With Suboxone	3 (4.7)

Signs of any IV abuse before and after switch

Period	Signs Of IV Misuse (n)	No Signs Of IV Misuse (n)	No Data Recorded (n)
Before Switch	9* (14%)	47	8
Week 1	7**	54	3
Week 2	5	58	1
Week 3	5	58	1
Week 4	6	56	2
Follow-up	7***(11%)	46	11

* 1 Heroin, 6 Subutex, 2 other

** 6 Suboxone, 1 other

*** 4 Subutex, 3 other

Study Conclusions I

- Switching from Subutex to Suboxone does not increase the withdrawal symptoms of opioid-dependent patients
- Many AEs (50%) were most likely the result of anxiety after being forced to switch to Suboxone
 - transfer from Subutex to Suboxone should be discussed and planned in advance with the patients
- **Buprenorphine dose adjustments are not necessary when patients are switched from Subutex to Suboxone**

Clinical challenges in the opiate maintenance treatment

- Currently, the most frequently used IV opiate in Finland is buprenorphine (70%)
 - Suboxone?
- The most common reason for transfer to methadone is polydrug IV abuse (amfe/benzo)
 - Central Pharmacy Registry?
- Buprenorphine snoring a new phenomena

Maintenance treatment in Finland, policy challenges and changes

- New SHM decree 1.1.08: pharmacy distribution allowed, covered by public health care insurance
- Estonia, Latvia, Lithuania are joining to EU Schengen treaty 1.1.08
 - Approximately 200 Finns are estimated to be in treatment in these countries
 - Patients in treatment not allowed to bring buprenorphine to Finland after 1.1.08
- Subutex will be withdrawn from the market, allowed under special licensing (pregnancy)

The Finnish Experience, Conclusions I, control

- Tightly controlled, from where does street buprenorphine originate?
 - In 2004 the Finnish custom confiscated 35,000 Subutex tablets, street buprenorphine originating from France, Estonia, Lithuania, Latvia and Germany
- Tight control appear to have had little effect on the diversion of buprenorphine

The Finnish Experience, Conclusions II, resources

- Currently, the most frequently used IV opiate in Finland is buprenorphine (70%)
 - Persons addicted to injection continue buprenorphine injection, however the street value of Suboxone is 60 % less
- Most frequent reason for IV use of buprenorphine is 'self treatment of addiction'
 - Limited access to treatment?
 - 13 % in treatment programs
- **More treatments should be available**

Conclusion: reasons for diversion

- Not sufficient treatment opportunities
- Treatment restrictions
- Profit
- Self treatment/detoxification
- Employment restraints
- Hedonism/intoxication
- Availability - no heroin
- Safer/better than heroin

Thank you for your
attention

