



PRESIDENZA DEL CONSIGLIO DEI MINISTRI
Ministro per la Cooperazione Internazionale e l'Integrazione
Dipartimento Politiche Antidroga

Cost Analysis in Drug Addiction: methods and results

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**Presidency of the Council of Ministers
Department for Anti-drug Policies**

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Components of social costs on addiction



Individual cost



Cost of enforcing the
Law



Social and healthcare
cost

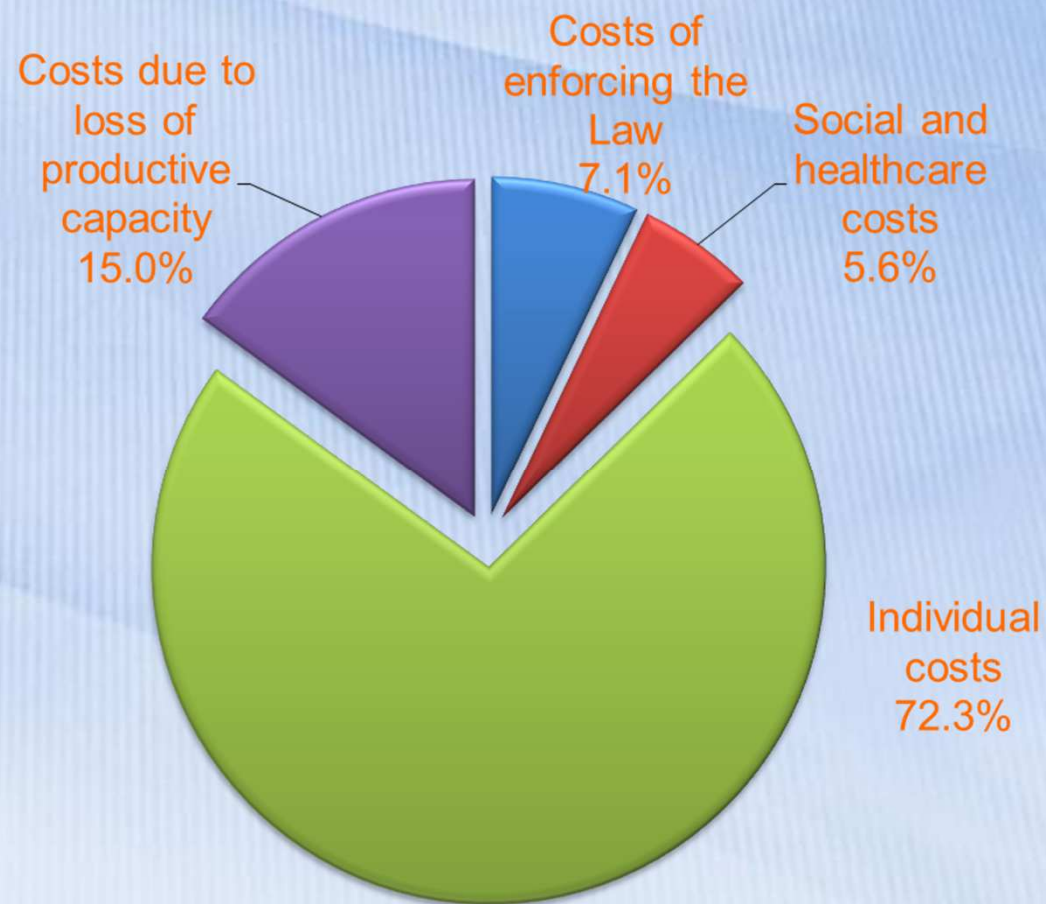


Cost due to loss of
productive capacity



Social cost of the drug-use phenomenon – The year 2010

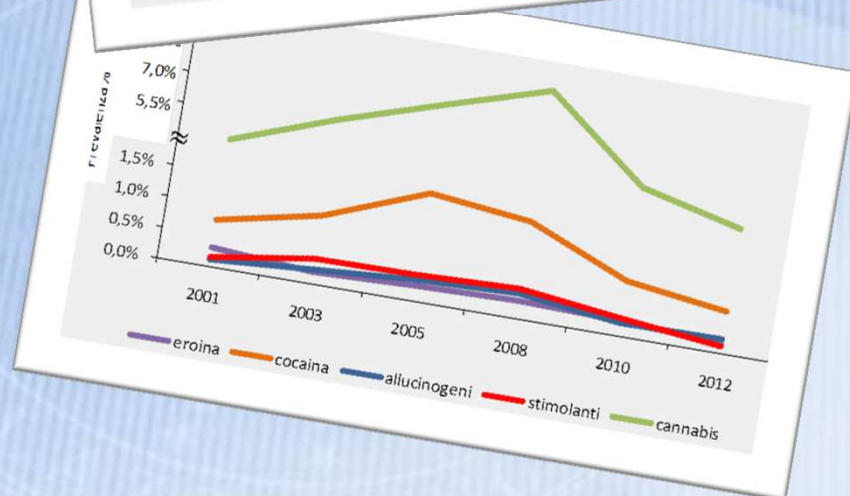
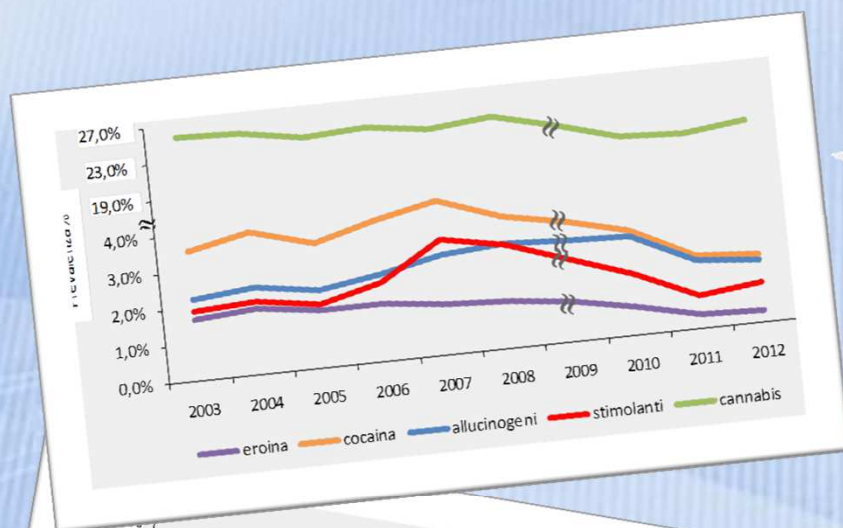
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Individual costs	€ 22,574,221,857.14
Costs of enforcing the Law	€ 2,209,981,956.57
Social and healthcare costs	€ 1,754,553,208.56
Costs due to loss of productive capacity	€ 4 ,680,632,520.60
Total	€ 31,219,389,542.87 € 784 per inhab 15-64 y



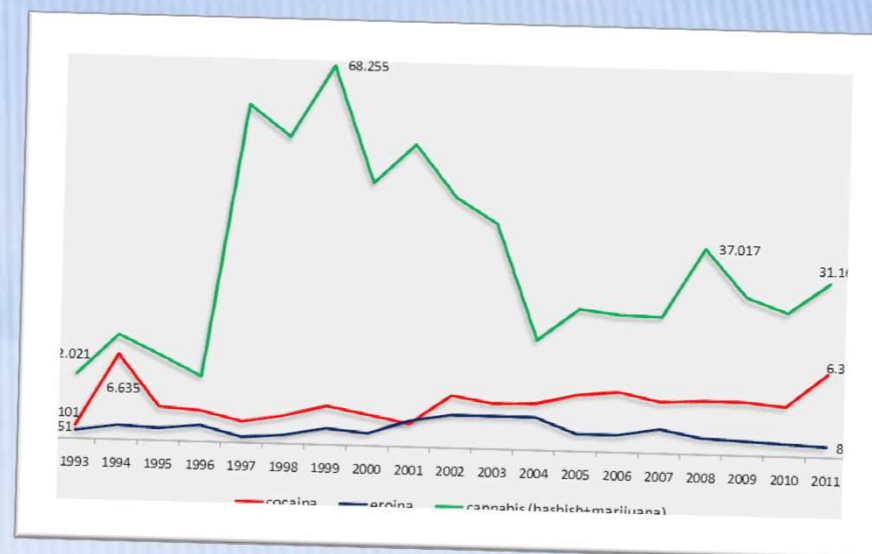


Individual cost – Methods

Demand



Supply





Individual cost – Drug use typology by substances

Drug user typology

Occasional Drug User

- Consumption in the past 30 days less than once a week

Recreational Drug user

- Consumption in the last 30 days from 1 to 3 times a week

Problem Drug User

- EMCDDA PDU indicator definition

Substances

Heroin



Cocaine



Cannabis





Individual cost – Estimates of number of Drug users



Drug	Problem Drug Users	Recreational Drug Users	Occasional Drug users
Cannabis	177,045	2,278,675	3,728,819
Heroin	135,486	19,472	-
Cocaine	157,708	188,086	-
Others Drugs	69,761	513,767	571,181
Total users	540,000	3,000,000	4,300,000



Individual cost – Consumption Hypothesis

	Day use in year (PDU)	Day use in year (regular)	Day use in year (Episodic)	Day Doses (gr) (PDU)	Day Doses (gr) (regular)	Day Doses (gr) (episodic)	Prices (Euros)
Low use							
Cannabis	250	120	24	2,0	2,0	1,0	9
Heroin	250	100	24	1,0	0,5	-	40
Cocaine	250	100	24	2,0	1,0	-	60
Others	250	100	24	2,0	2,0	1,0	10
Medium use							
Cannabis	300	150	24	2,0	2,0	1,0	9
Heroin	300	100	24	1,0	0,5	-	40
Cocaine	300	100	24	2,0	1,0	-	60
Others	300	100	24	2,0	2,0	1,0	10
High use							
Cannabis	300	150	24	2,0	2,0	1,0	9
Heroin	300	120	24	1,0	0,5	-	40
Cocaine	300	120	24	2,0	1,0	-	60
Others	300	120	24	2,0	2,0	1,0	10



Individual cost – Costs for drug demand

Milion Euros	Low use	Medium use	High use
Cannabis	7,636	9,512	9,710
Heroin	2,052	2,453	2,463
Cocaine	8,370	9,771	10,044
Others Drugs	1,794	2,168	2,509
Total	19,851	23,904	24,725





Costs of enforcing the Law

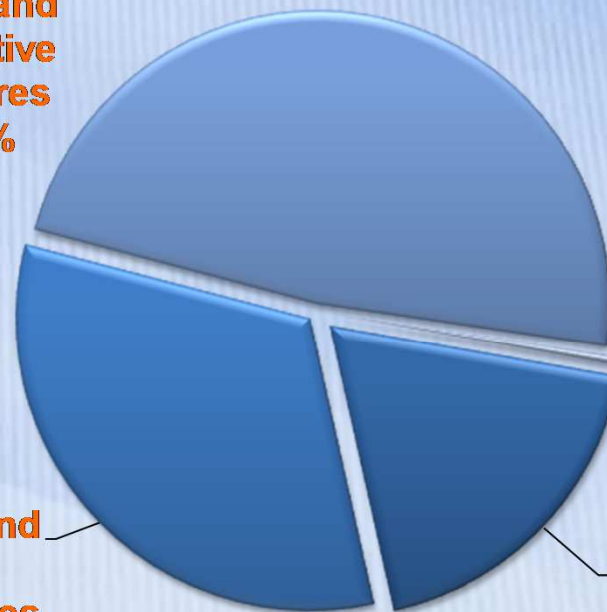
Cost category	Cost
Law Enforcement Activities	€ 413,592,760.62
Prison and alternative measures	€ 1,065,924,951.57
Trials and legal expenses	€ 720,336,244.38
Other Central Administration costs	€ 10,128,000.00
Total	€ 2,209,981,956.57 € 55 per inhab 15-64 y

**Prison and
alternative
measures
48.2%**

**Trials and
legal
expenses
32.6%**

**Other
Central
Administra-
tion costs
0.5%**

**Law
Enforce-
ment
Activities
18.7%**





Costs of Law enforcement activities – Methods

Law Enforcement Activities

ART 75 309/90

- Reporting for illicit drug possession for personal use

**ARTT 73 and 74
309/90**

- Crimes related to production and illegal trafficking of drugs

**ARTT 186 and
187 CdS**

- Checking the violations related to driving under the influence of alcohol or drugs

Law Enforcement

**State
Police**



**Carabinieri
Corps**

**Guardia di
Finanza**





Law enforcement – Costs Typology by activities typology

Law Enforcement Activities

ART 75 309/90

- Reporting for illicit drug possession for personal use

ARTT 73 and 74 309/90

- Crimes related to production and illegal trafficking of drugs

ARTT 186 and 187 CdS

- Checking the violations related to driving under the influence of alcohol or drugs

Costs for Law Enforcement Activities

Personnel Costs



Good and services costs and overhead costs



Cost of enforcing the Law – Direct Costs

Law Enforcement Activities



Number of reports
Art. 75 309/90



Number of complaints
Artt. 73 and 74
309/90



Number of controls
Artt. 186 and 187

Direct Costs (personnel law enforcement)

Average time (in days) for each activity

Number of units of the personnel employed by single activity

Average cost of personnel and unit of time (per day)

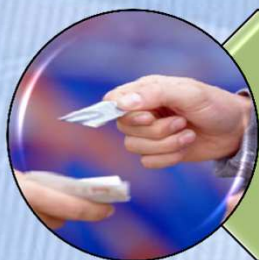
Cost of personnel for individual assets



Cost of enforcing the Law – Overhead costs



Number of reports
Art. 75 309/90



Number of complaints
Artt. 73 and 74
309/90



Number of controls
Artt. 186 and 187

Cost of the personnel in the law enforcement

Overhead personnel cost in the law enforcement

%

Overhead costs of goods and services and overhead costs

Costs of goods and services and overhead costs employed activities of drug control

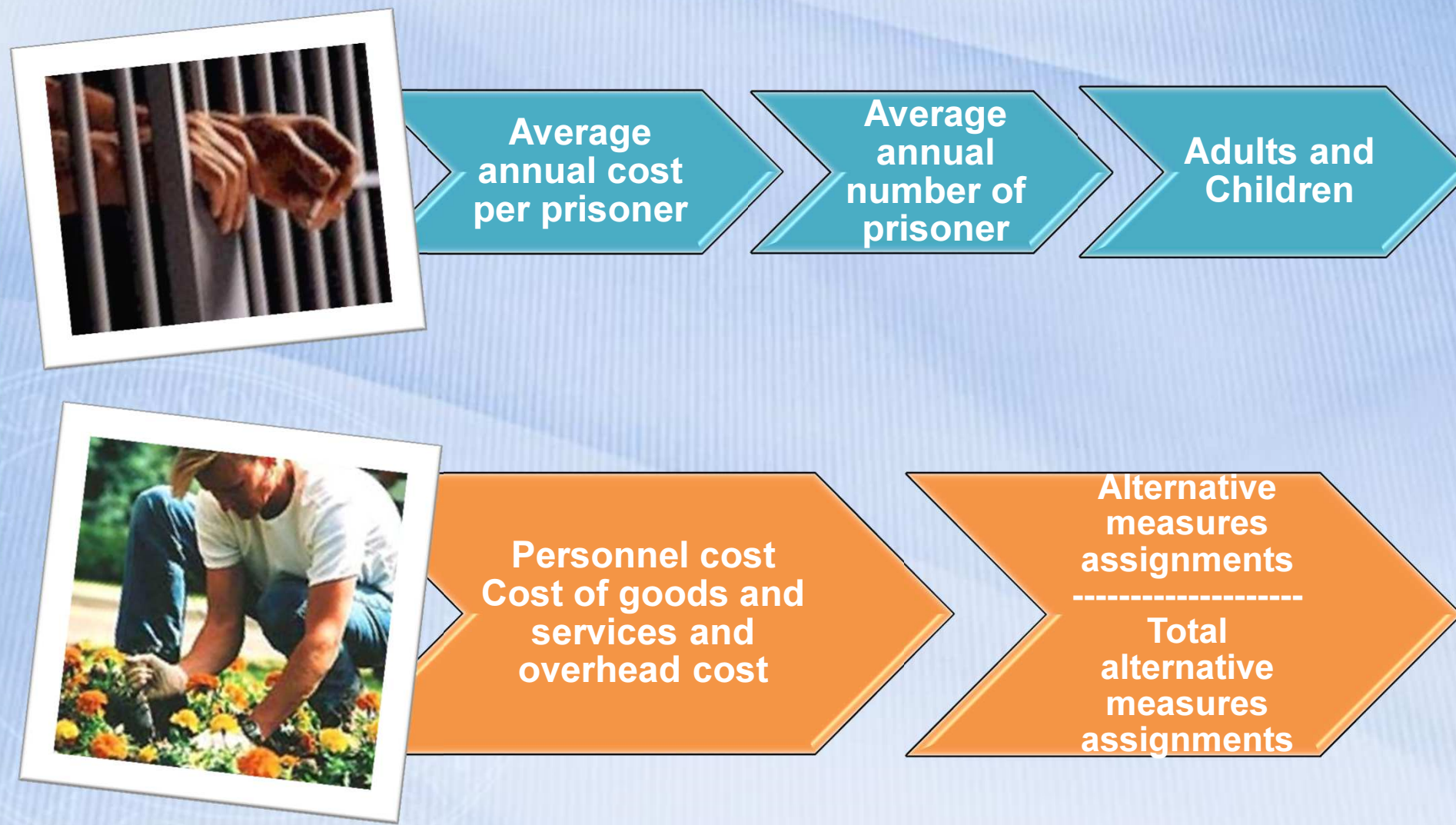


Cost of enforcing the Law – Details

Cost category	Number of Law Enforcement Actions	Average cost per action	Total cost (millions of Euros)
Reports filed under Article 75	50,253	361	18.14 €
Charges filed under Articles 73/74	138,497	1,989	275.47 €
Checks under Articles 186/187 (of which):	1,688,100		
Negative	1,643,135	26	42.72 €
Positive Art. 186	40,721	281	11.44 €
Positive Art. 187	4,244	421	1.79 €
General costs (Law Enforcement Agencies)			64.03 €
Total			413.59 €



Cost of enforcing the Law – Prison and alternative measures





Cost of enforcing the Law – Prison and alternative measures



Prison	Number of drug-addicted convicts	Average yearly cost per convict	Total cost (millions of Euros)
Adults	24,008	€ 42.584.55	€ 1,022.37
Minors	474	€ 42.584.55	€ 20.19
Total	24,482	€ 42.584.55	€ 1,042.56

Alternative measure	Total cost of personnel (millions of Euros)	Coefficient of probation placements of drug addicts	Total cost (millions of Euros)
Personnel	€ 130.20	16%	€ 20.79
General costs	€ 16.09	16%	€ 2.57
Total			€ 23.37





Cost of enforcing the Law – trial-related activities

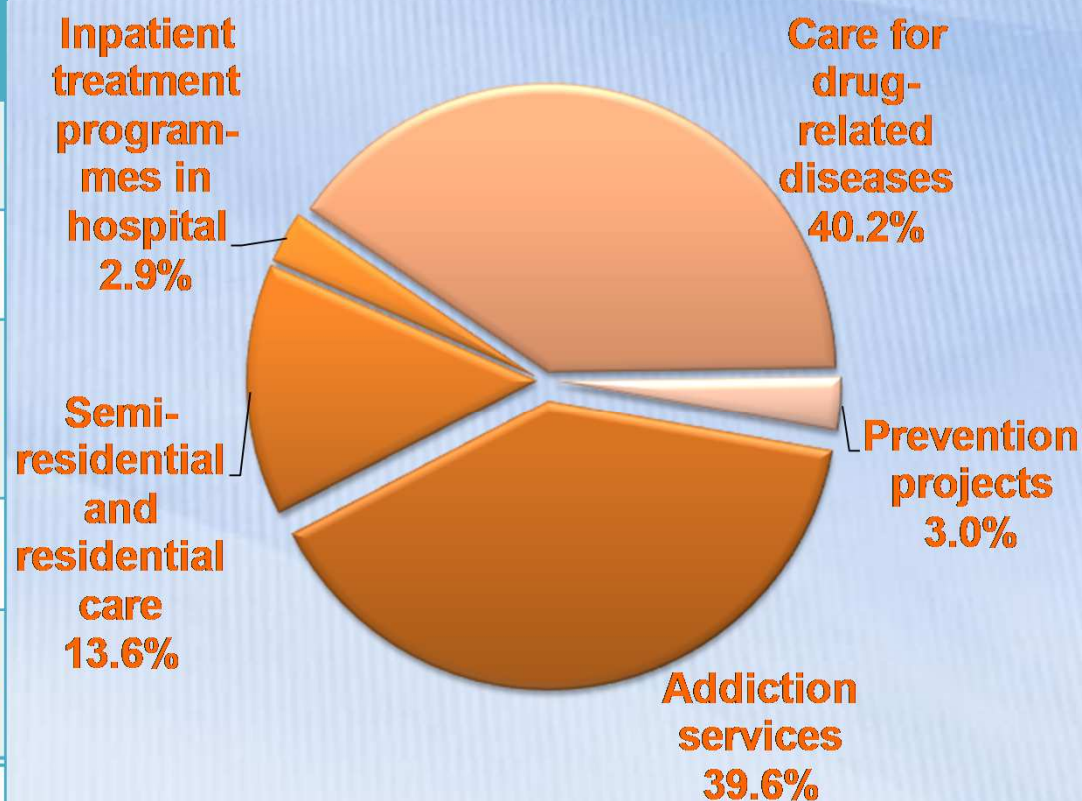


Cost category	Number of trials	Average cost per activity	Total cost (millions of Euros)
Legal expenses	92,332	3,702.12	€ 341.82
Trial costs Articles 73/74	92,332	2,880.90	€ 266.00
General costs			€ 112.52
Total			€ 720.34



Social and healthcare costs

Cost category	Cost
Addiction services	€ 694,769,648.69
Semi-residential and residential care	€ 249,560,404.75
Inpatient treatment programmes in hospital	€ 51,473,742.64
Care for drug-related diseases	€ 705,840,000.00
Prevention projects	€ 52,909,412.48
Total	€ 1,754,553,208.56 € 44 per inhab 15-64 y





Social and healthcare costs – Addiction centers and T.C.



554 Public Addiction Centers

• **172,211** Outpatients

- 33,679 new clients/year entering treatment
- 138,532 already known patients

1,067 Therapeutic Communities
(funded by public money) providing care to:

• **12,740** Inpatients
inside residential services

• **4,183** Outpatients
in outpatient clinics



Social and healthcare costs – financial statements

Regions



**Addiction services and
therapeutic communities**





Social and healthcare costs – collect data from Regions

Cost of

Addiction services

**Semi-residential and
residential care**

Prevention projects





Social and healthcare costs – Hospital admissions



DRG	Ordinary	
	Admissions	Cost
523	2,935	3,454,495
430	2,866	8,411,710
522	1,406	3,527,654
428	1,391	3,286,933
450	1,122	1,585,386
521	923	2,540,096
449	887	2,234,353
564	663	899,237
Other DRG	6,842	24,288,398
Total	19,035	50,228,261

DRG	Day Hospital	
	Admissions	Cost
522	813	197,559
450	777	227,661
523	773	96,625
433	416	127,296
430	244	46,604
428	194	39,188
449	185	56,240
490	185	54,390
Other DRG	1,272	399,918
Total	4,859	1,245,481

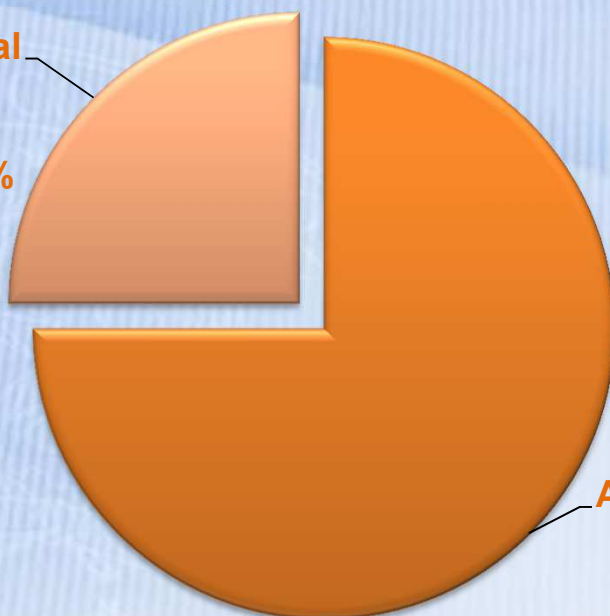


Social and healthcare costs – Drug related infectious diseases

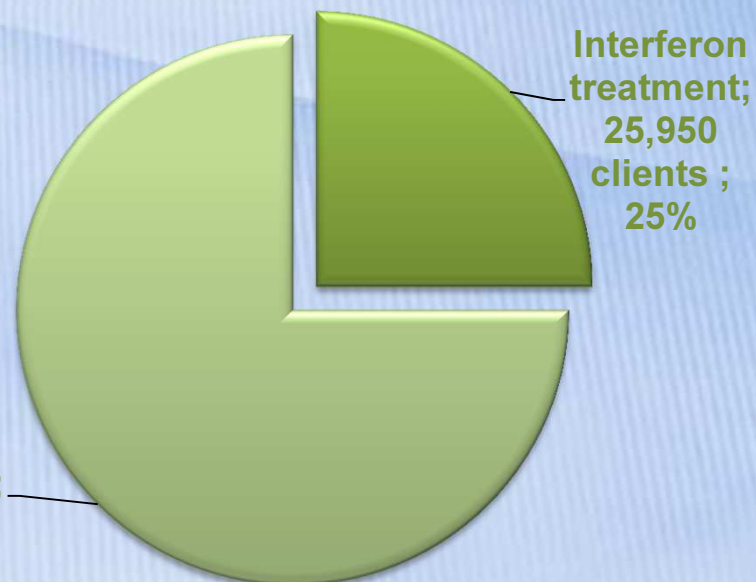


**20,760 HIV
positive
client in
addiction
services**

**Not in
antiretroviral
treatment;
5,190
clients; 25%**



**Antiretroviral
treatment;
15,570
clients; 75%**



**Interferon
treatment;
25,950
clients ;
25%**

**Not in
interferon
treatment;
77,850
clients ;
75%**



**103,800 HCV
positive
client in
addiction
services**



Social and healthcare costs - Drug related infectious diseases

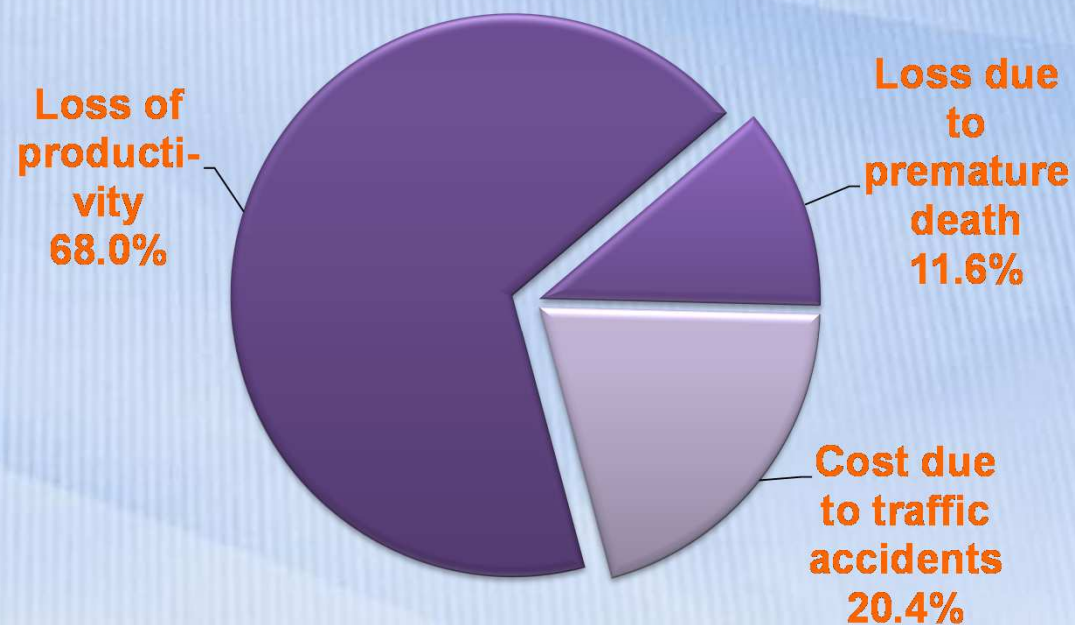


Cost category	Clients in treatment	Unit cost per year (Euros)	Total cost (millions of Euros)
HIV Treatment	15,570	€ 12,000.00	€ 186.84
HCV Treatment	25,950	€ 20,000.00	€ 519.00
Total	41,520		€ 705.84



Costs due to loss of productive capacity

Cost category	Cost
Loss of productivity	€ 3,180,976,933.39
Loss due to premature death	€ 542,645,107.66
Cost due to traffic accidents	€ 957,010,479.55
Total	€ 4,680,632,520.60 € 117 per inhab 15-64 y





Costs due to loss of productive capacity



172,211

Client in treatment

125,548

Clients who can be reintegrated (70%)

97,885

Clients who can be reintegrated,
excluding unemployment rate (18,8%)

32,497.08 €

Unit cost per year



Costs due to loss of productive capacity – traffic accidents



Deaths



Temporary or permanent disability





Costs due to loss of productive capacity

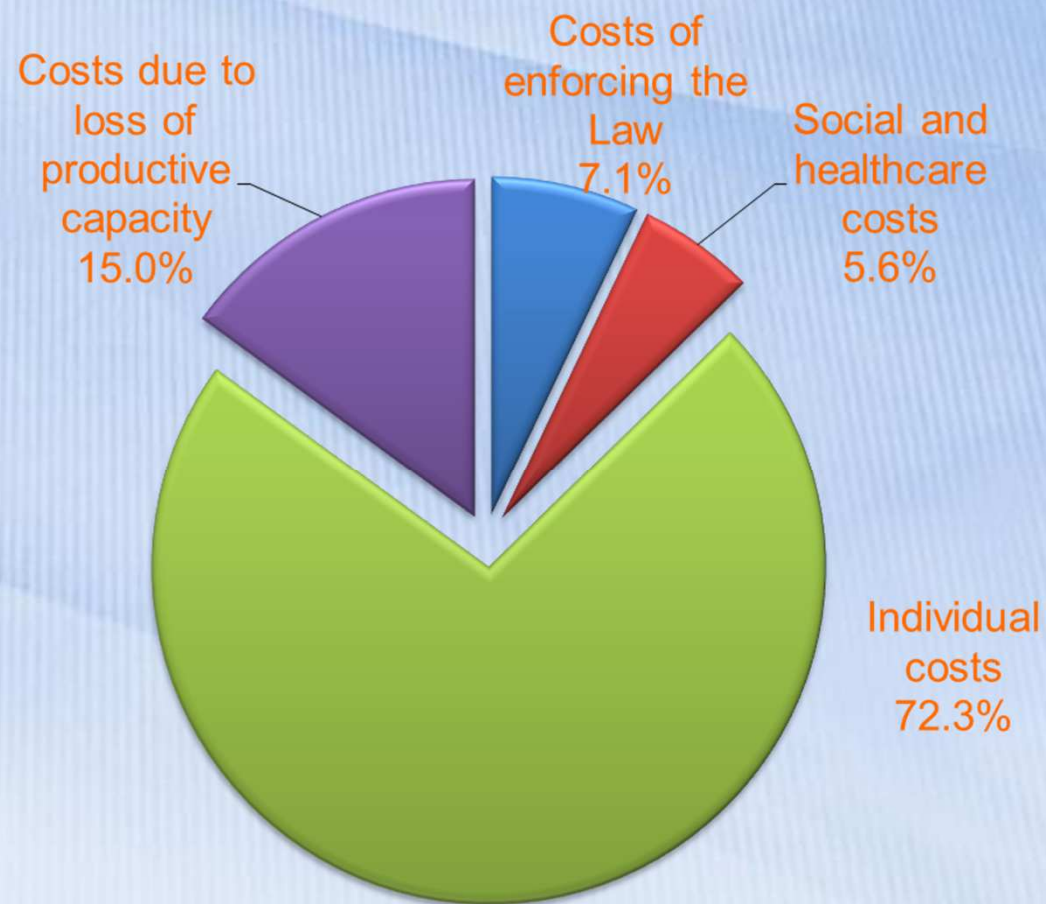


Cost category	Subjects	Unit cost (Euros)	Total cost (millions of Euros)
Clients in treatment who can be reintegrated (exclusive of unemployment rate)	98,263	€ 32,372.17	€ 3,180.98
Deaths by overdose	374	€ 1,450.922.75	€ 542.65
Traffic accidents (deaths)	247	€ 1,450.922.75	€ 358.38
Traffic accidents (invalid)	12,368	€ 48,401.73	€ 598.63
Total			€ 4,680.64



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Thank you for your attention

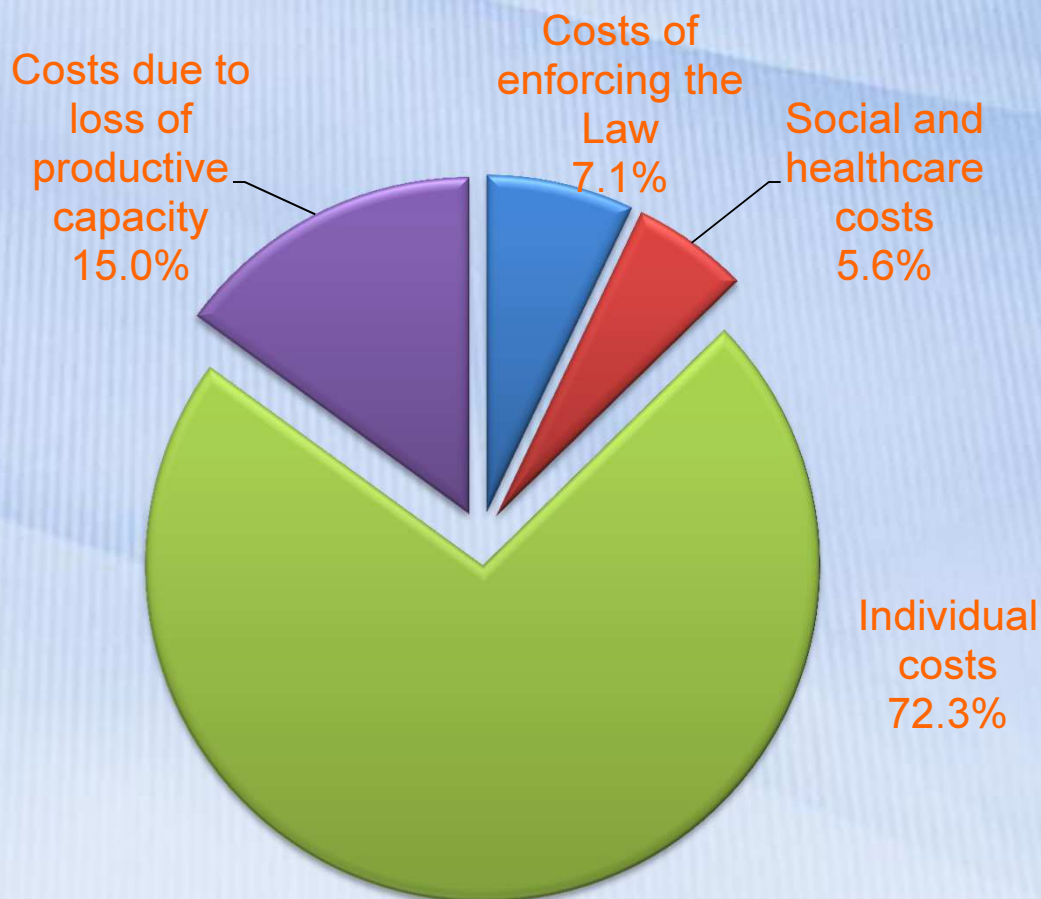
Bruno Genetti - b.genetti@governo.it

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Total
€ 31,219,389,500
€ 780 pop 15-64 years



Cost of enforcing the Law

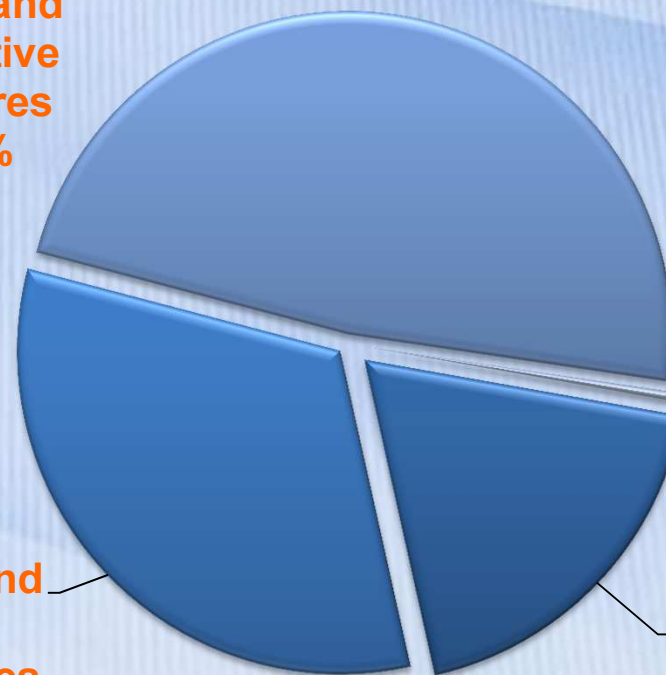
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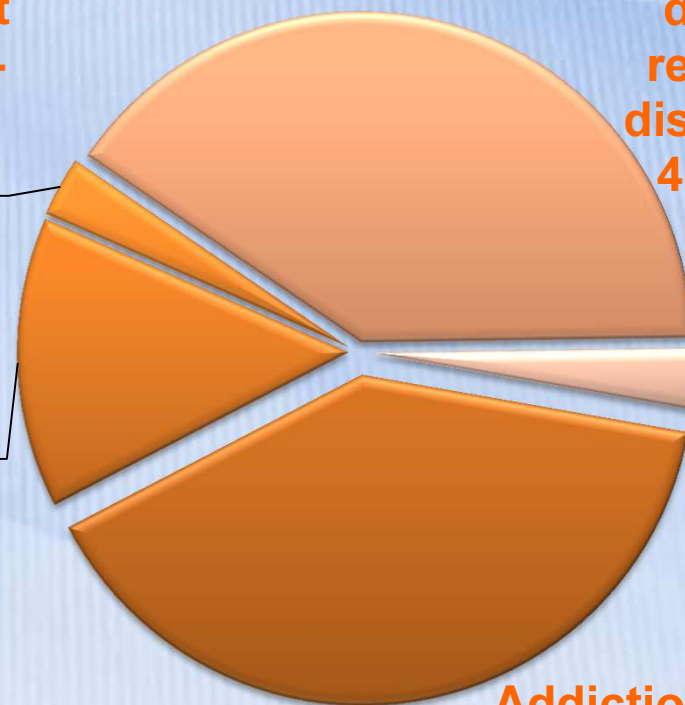
Inpatient treatment programmes in hospital
2,9%

Semi-residential and residential care
13,6%

Care for drug-related diseases
40,2%

Prevention projects
3,0%

Addiction services
39,6%

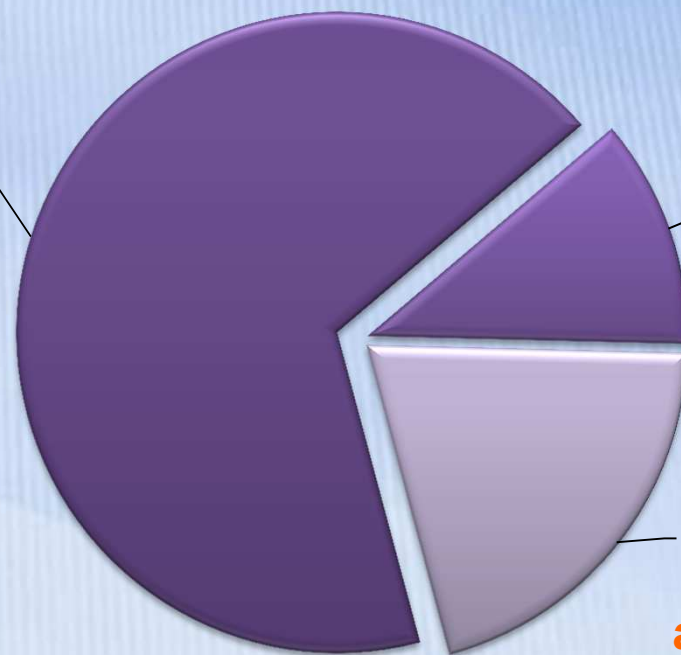




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Loss of
producti-
vity
68.0%



Loss
t
prem
de
11.1%

Cost du
to traffi
acciden
20.4%