



Heroin in Slovenia - an overview for 2009 and quick look into the past

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1. Methods and sample population

analytical techniques: GC-MS, FTIR and AgNO₃ spot test

analysis: identification and quantitation of heroin, identification of adulterants in some cases also diluents with TMS derivatization, form determination: base, HCl

sample population for 2009: all samples of the net weigh above 0.1 g

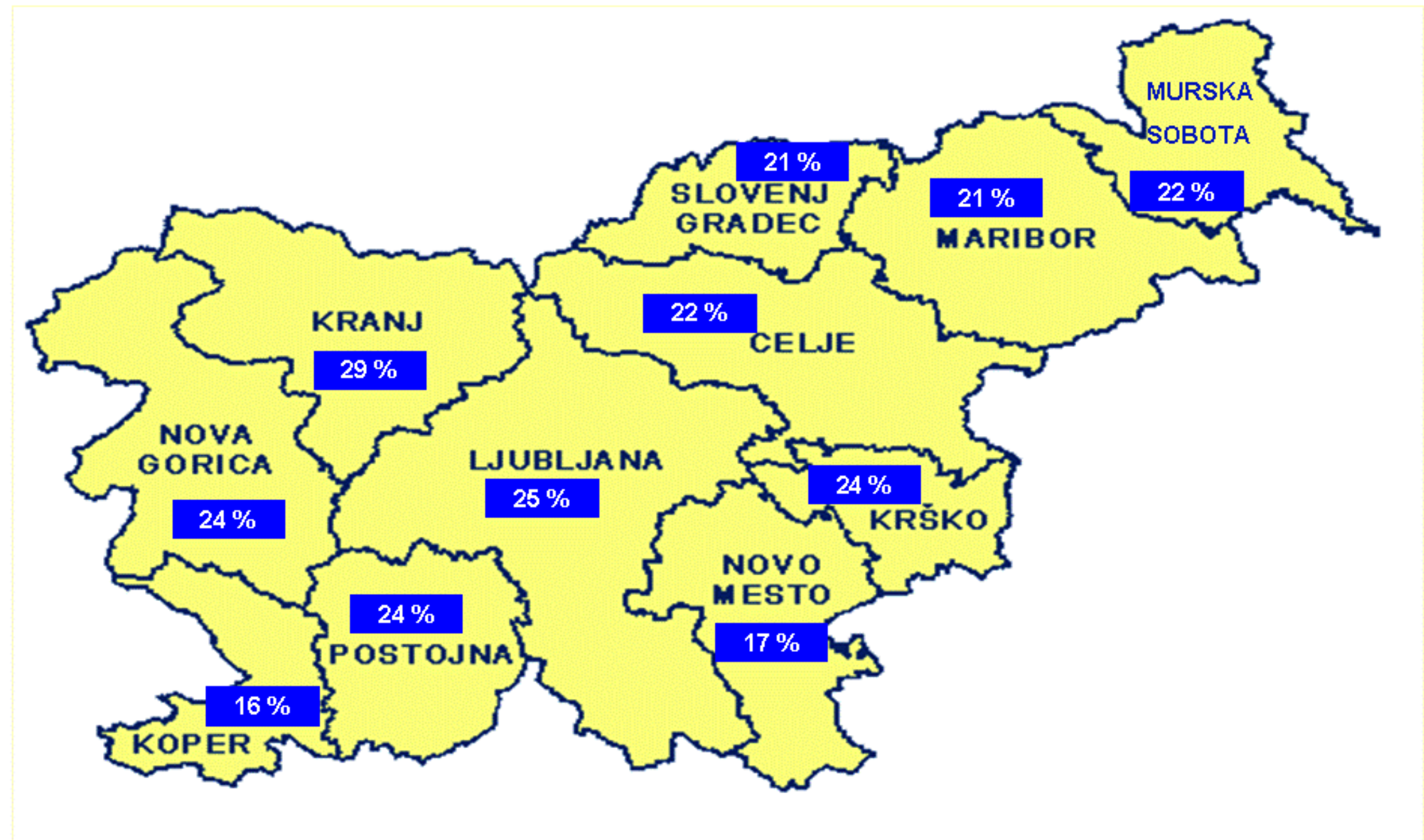


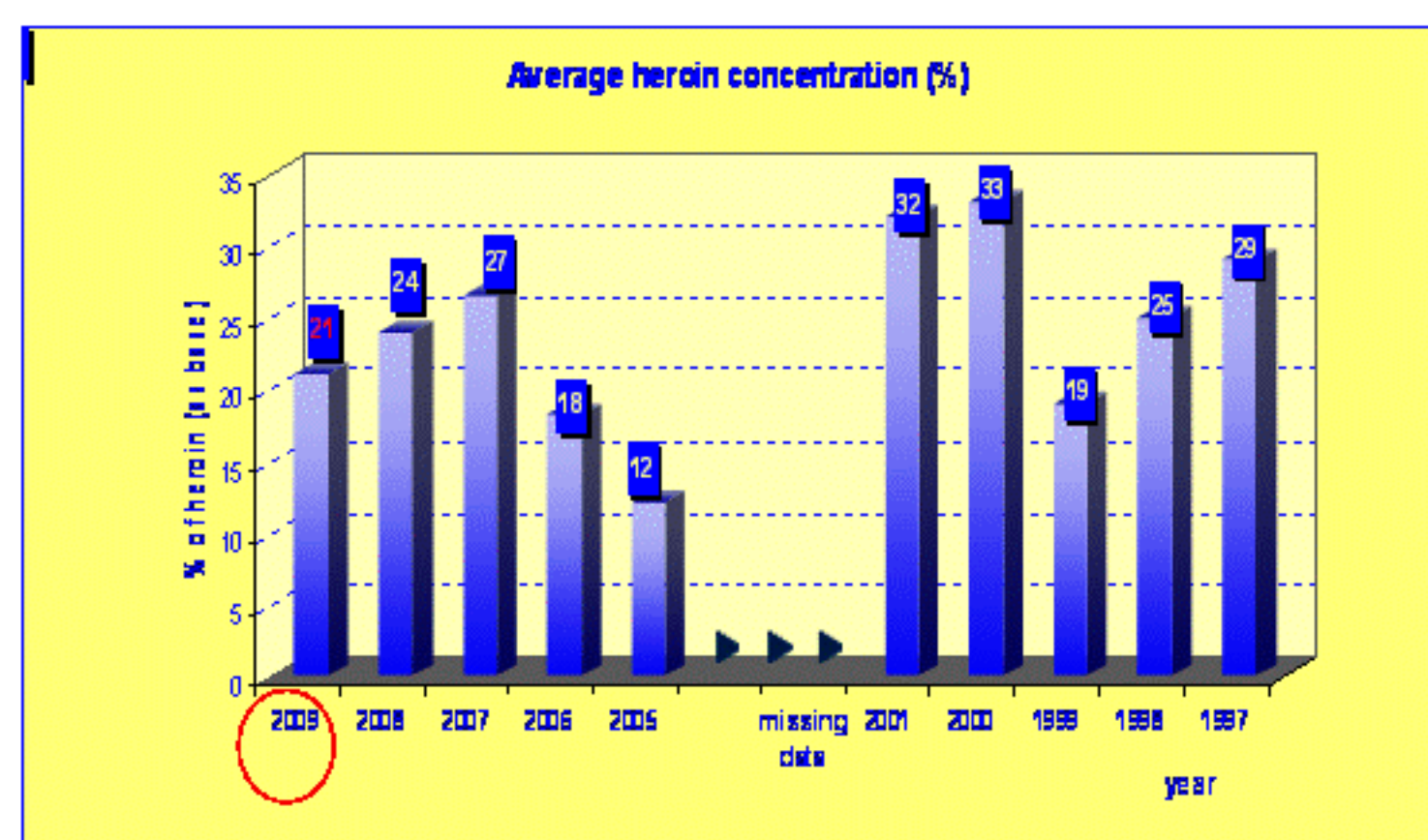
Fig 1: Heroin purity 2009 - street level (sample weight up to 1 g) at different regions of Slovenia

2. Results

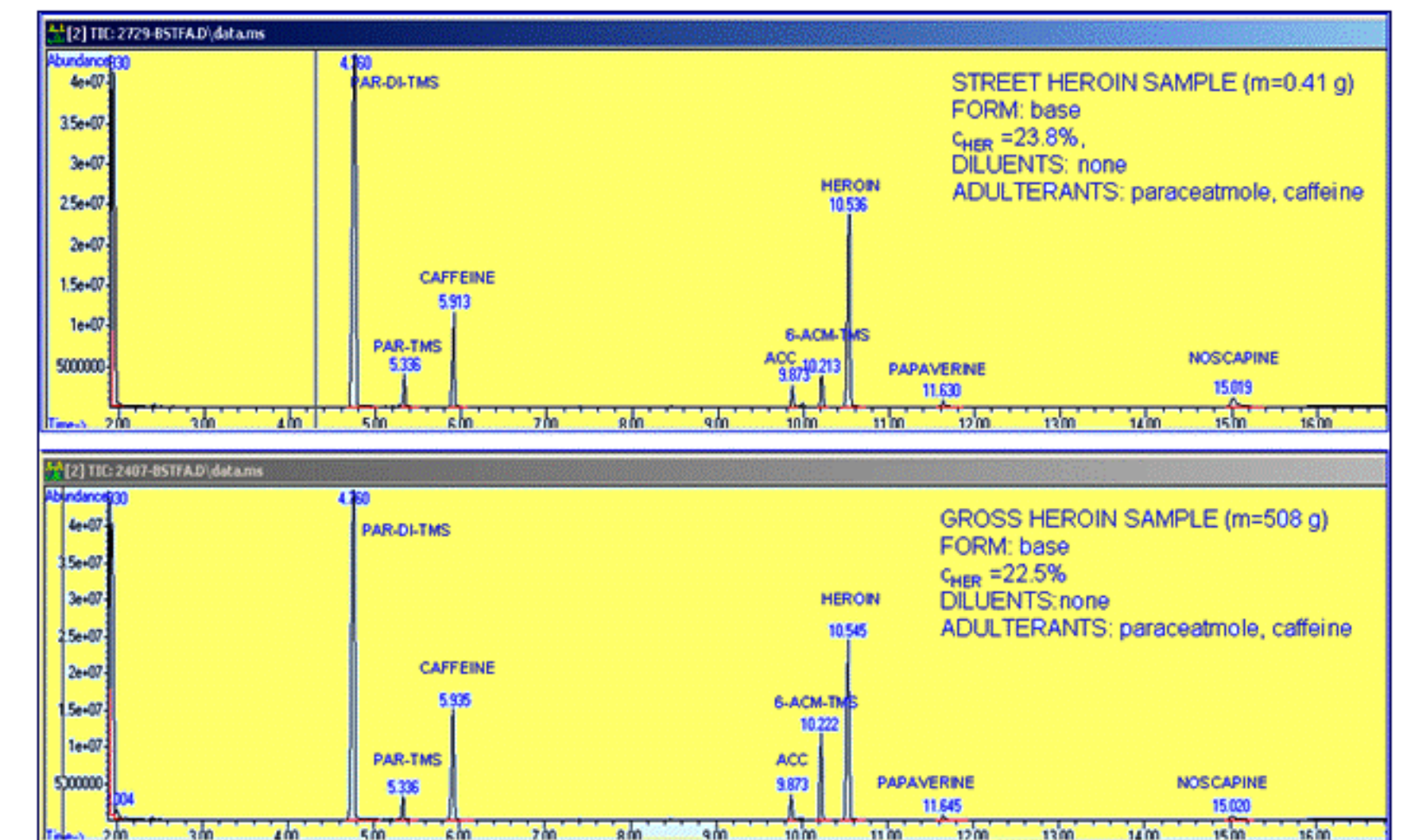
Studied population 2009

FD	number of samples	weight (g)	average weight per sample	avg. heroin conc. (%)	note
LJUBLJANA	418	6948	17	23.2	
CELJE	197	3362	17	22.4	
KRŠKO	26	10229	393	12.0	low average concentration due to one big seizure (10kg) of heroin c=9%
KOPER	27	154	6	16.6	
KRANJ	162	215	1	28.7	? Strictly focused to addicted users?
MARIBOR	69	24697	358	17.4	low average concentration due to one big seizure (10kg) of heroin c=9%
MURSKA SOBOTA	29	166	6	24.2	
NOVA GORICA	59	1054	18	23.0	
NOVO MESTO	14	74	5	16.5	
POSTOJNA	22	311	14	23.2	
SLOVENJ GRADEC	13	45	3	23.0	
SUM	1036	47255	46	20.9	

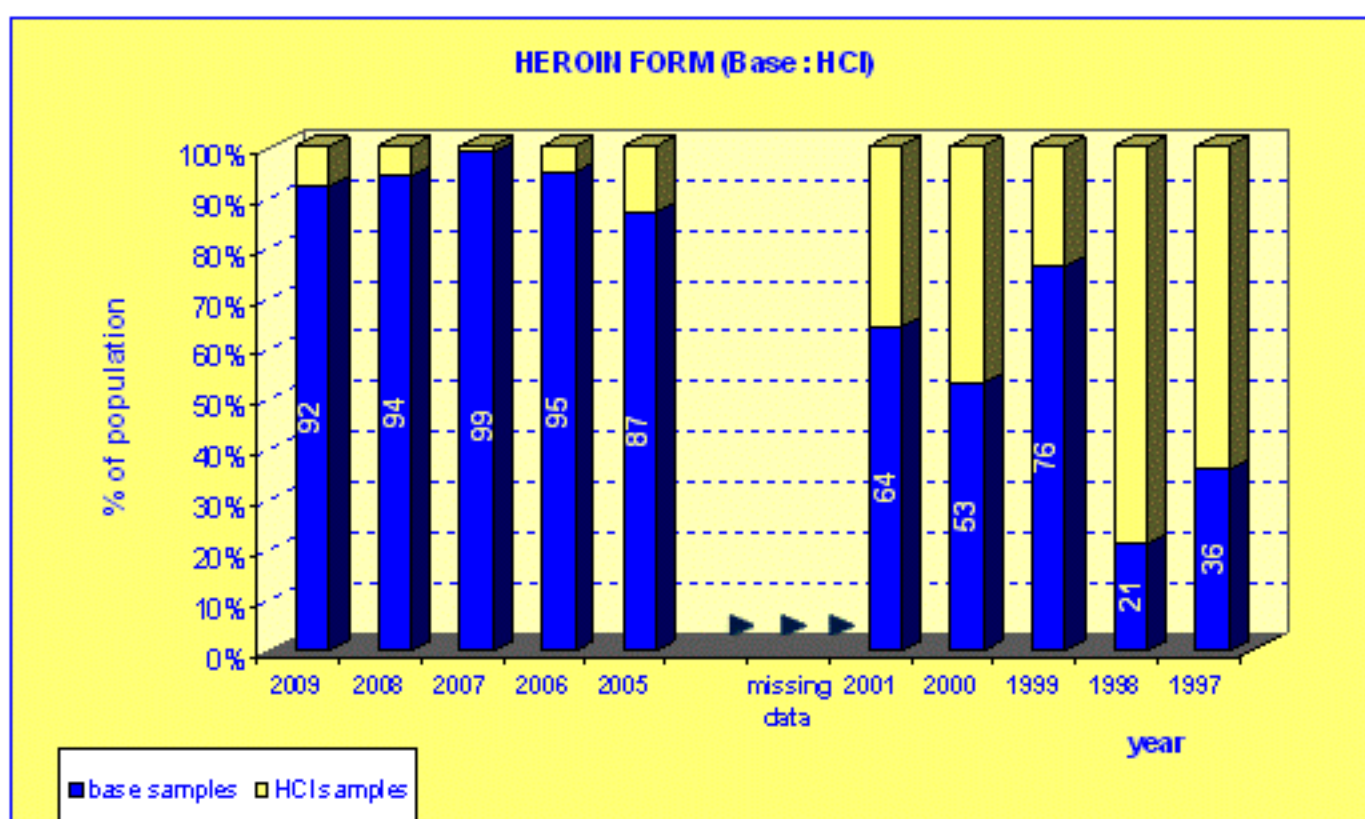
Purity history



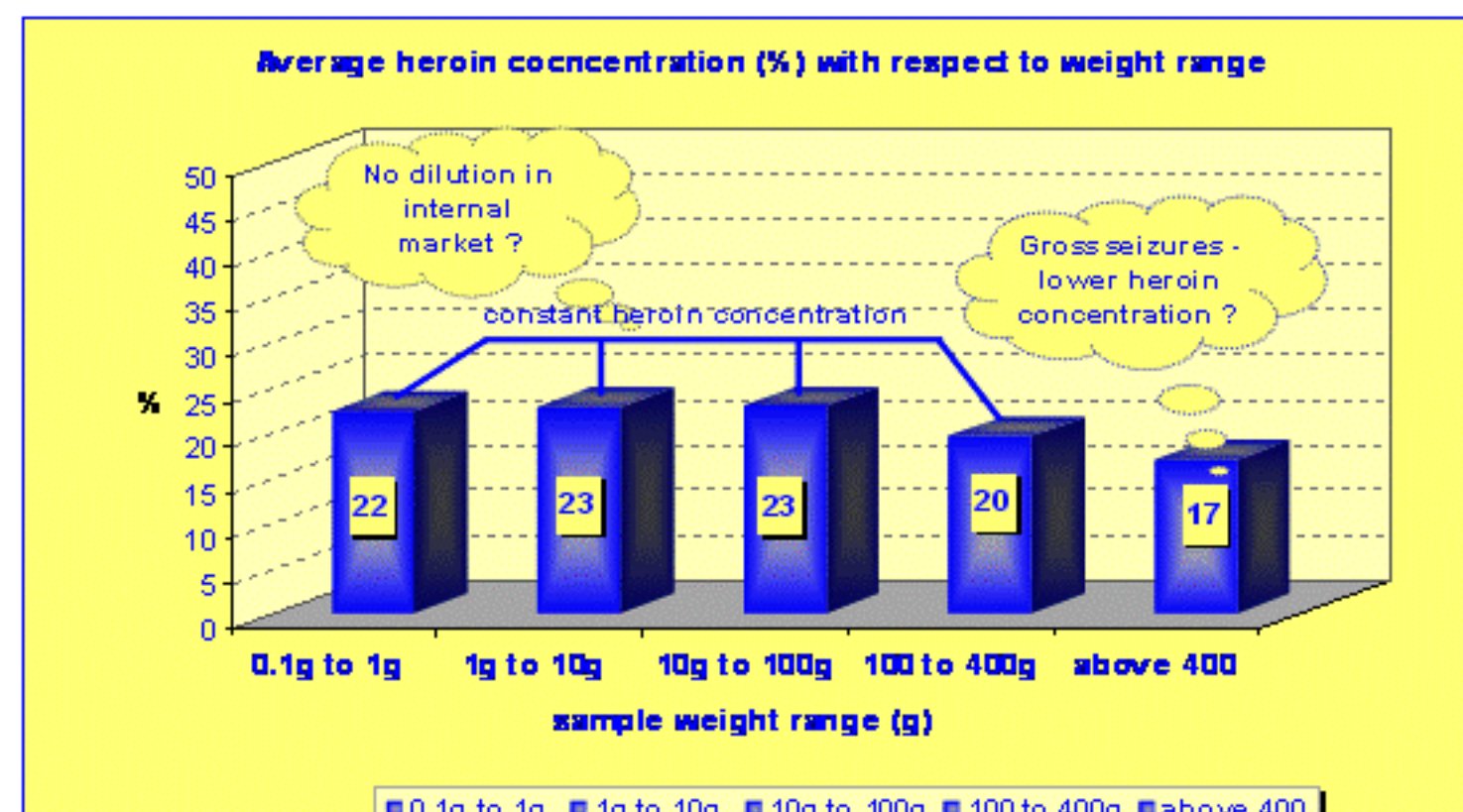
Typical samples in 2009



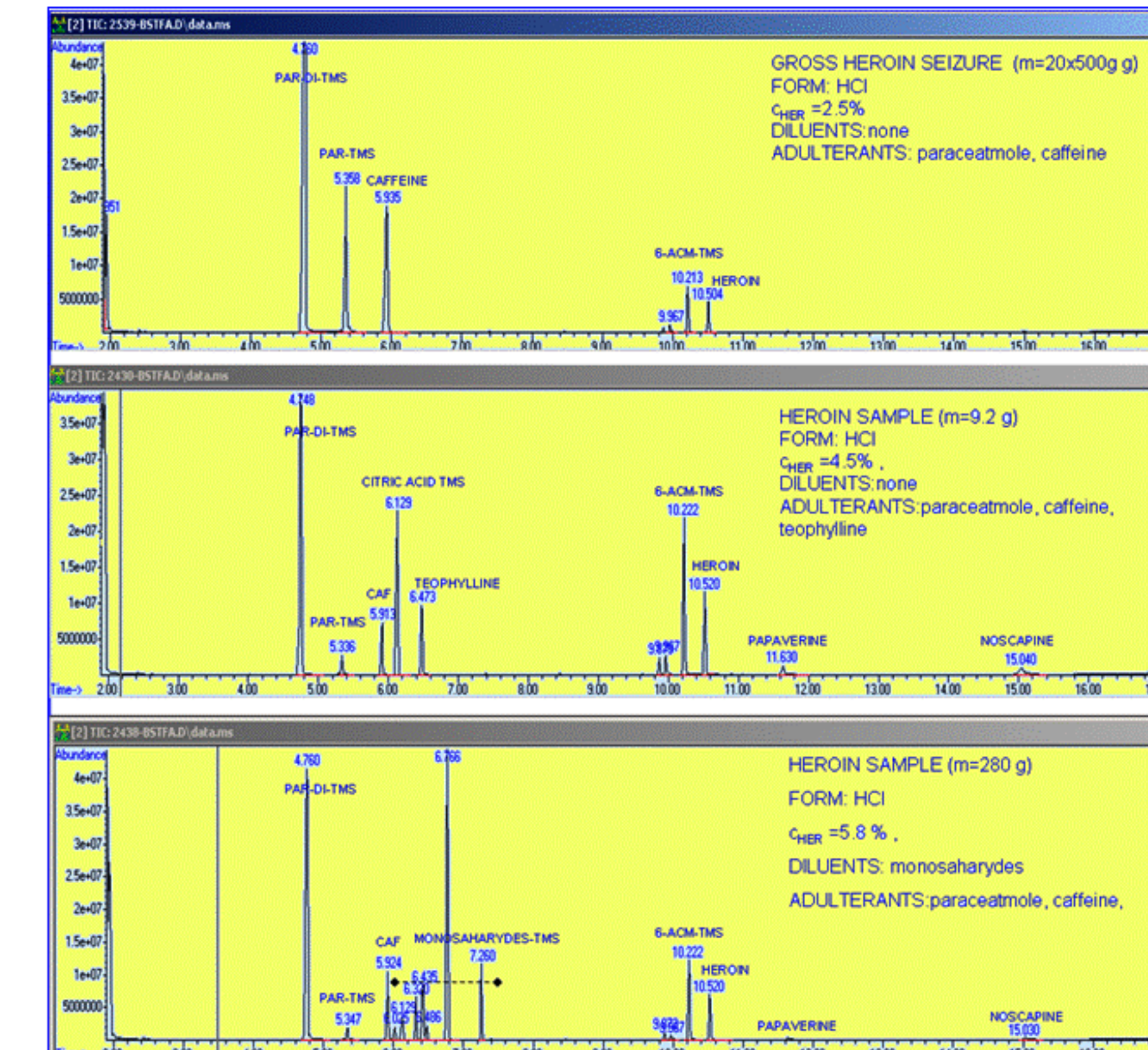
Form (base, HCl) overview



Purity by weight 2009



Some atypical samples in 2009

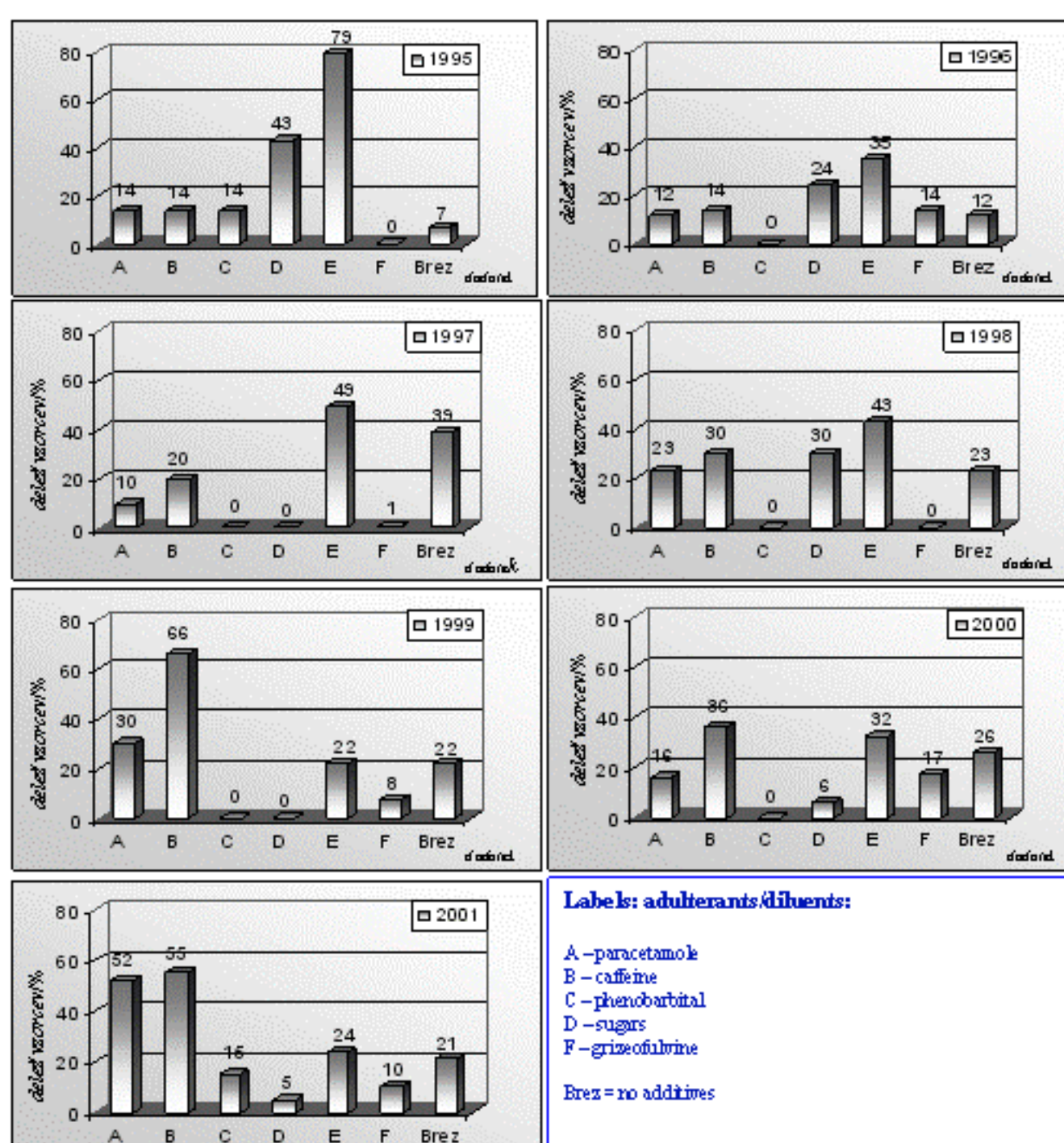


Adulterants/Diluents 2009

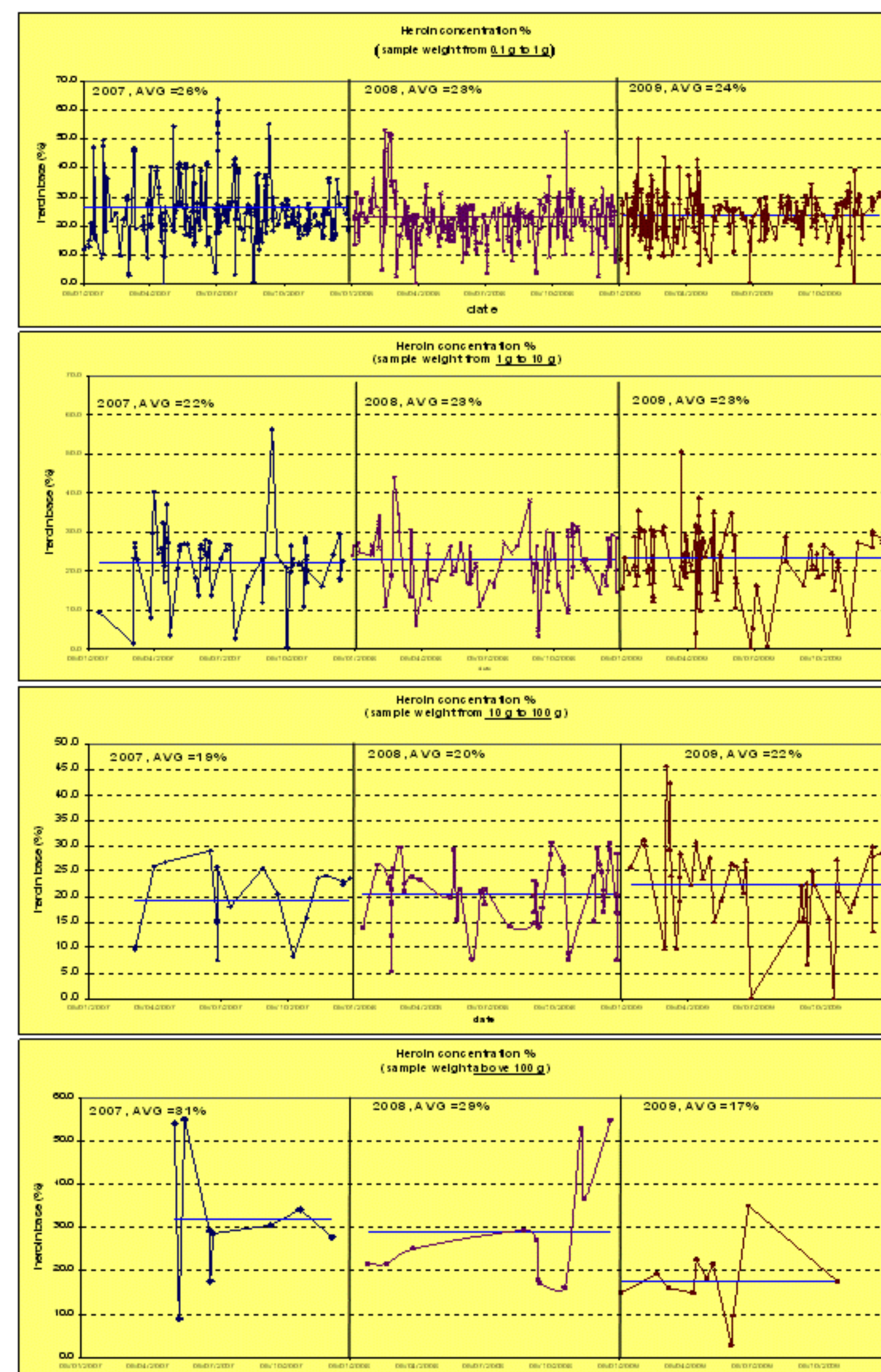
Adulterants: 100 % combination paracetamol + caffeine and in rear cases some additional compounds.

Diluents not systematically screened.

Adulterants/diluents history



Purity by weight 2007-2009



3. Conclusions

- Average purity on street level is stable for the last three years (22%-23%); there are minor differences in different parts of Slovenia.
- No strong evidence for extensive adulteration of samples on street level.
- Two atypical gross seizures in 2009 (heroin HCl, low heroin concentration, strong transesterification).
- Theophylline detected in some samples.
- Adulterants 2009: 100% paracetamol, caffeine combination.

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** involved in investigations from 2007 to 2009