

Drug Use in the Americas

Information for Action

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CICAD/SSM/OEA

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Sources of information



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- Official information from OAS member states:
 - CICAD/OID Report on Drug use in the Americas 2015.
 - Research studies supported by CICAD/OID through the Smokable cocaine project, and other research studies.
 - New data from NDO's
- Reviews of international literature on prevention science.





Where is the data pointing us?

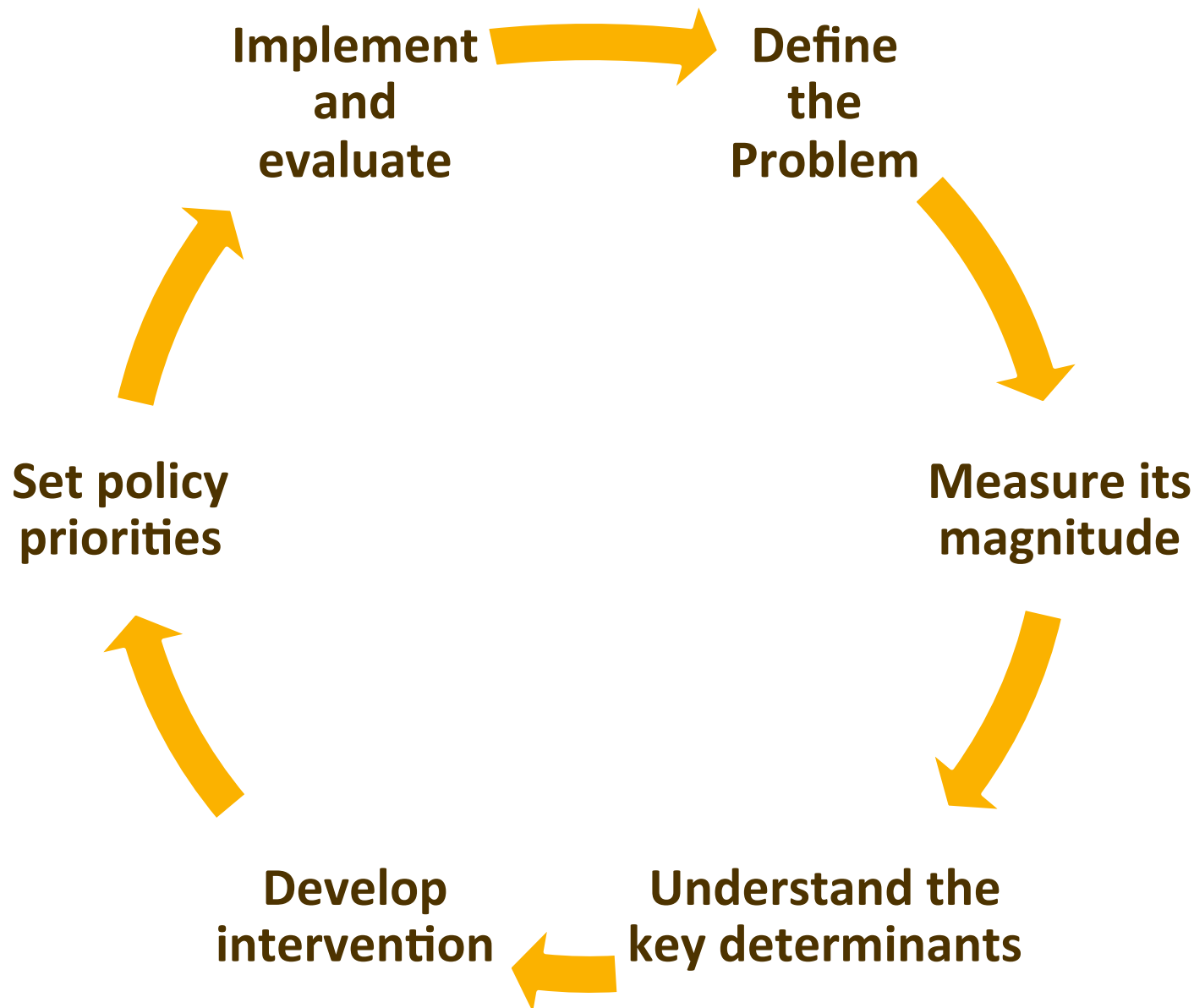
- Early initiation of substance use
- Problematic use -> binge drinking among minors
- Increasing trends in marijuana use
- Adulteration of substances

Important implications for public health.

The Public Health Paradigm



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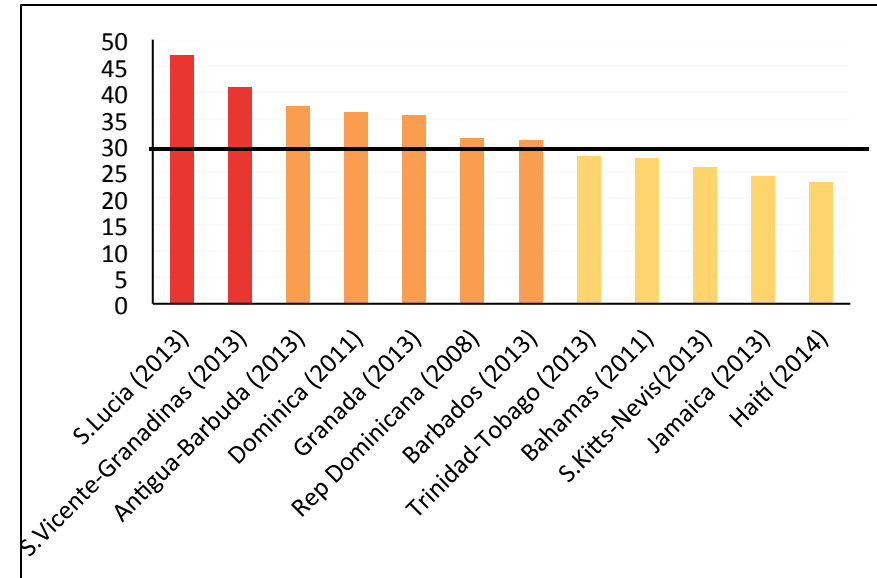
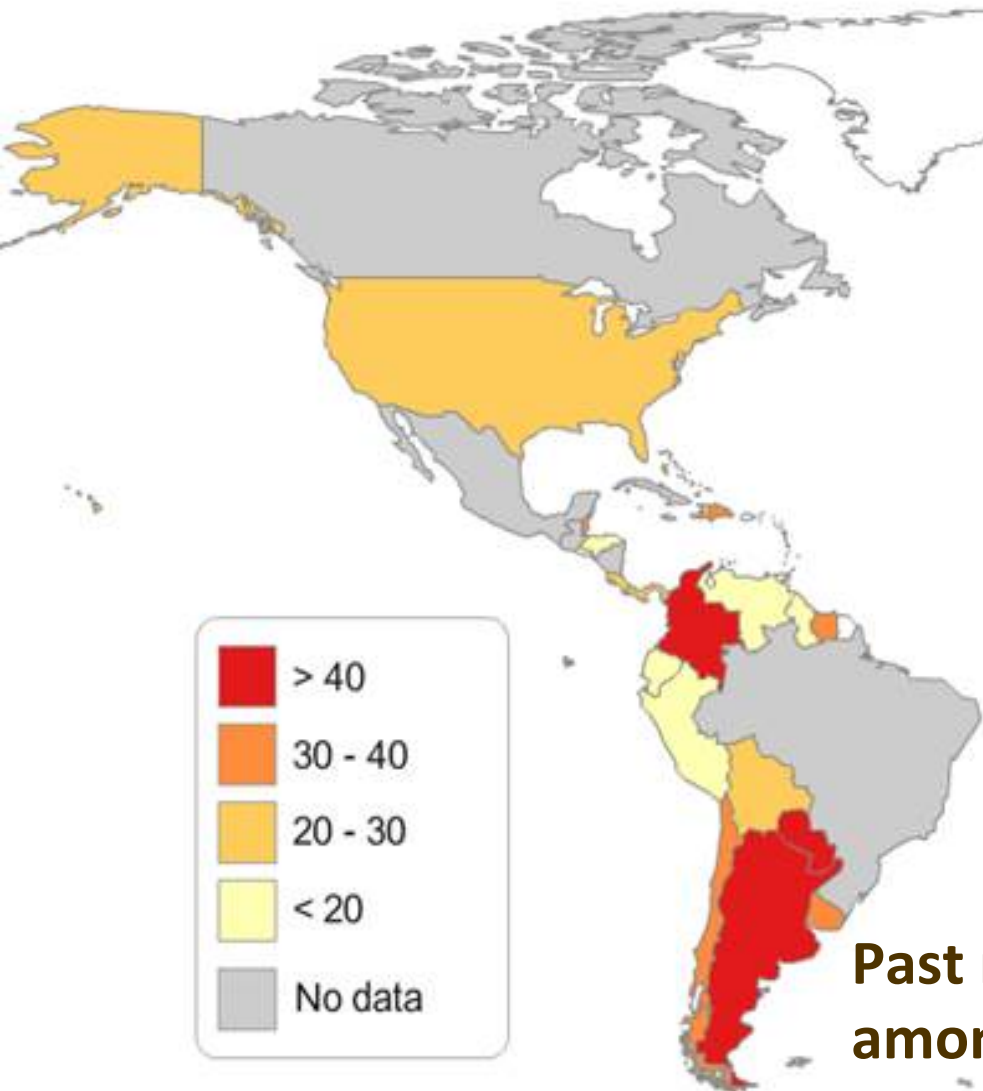
Define the problem(s)

- Is there a single drug problem?
- Does it vary across countries?
- Is it therefore reasonable to proscribe a single response?

Measuring the magnitude



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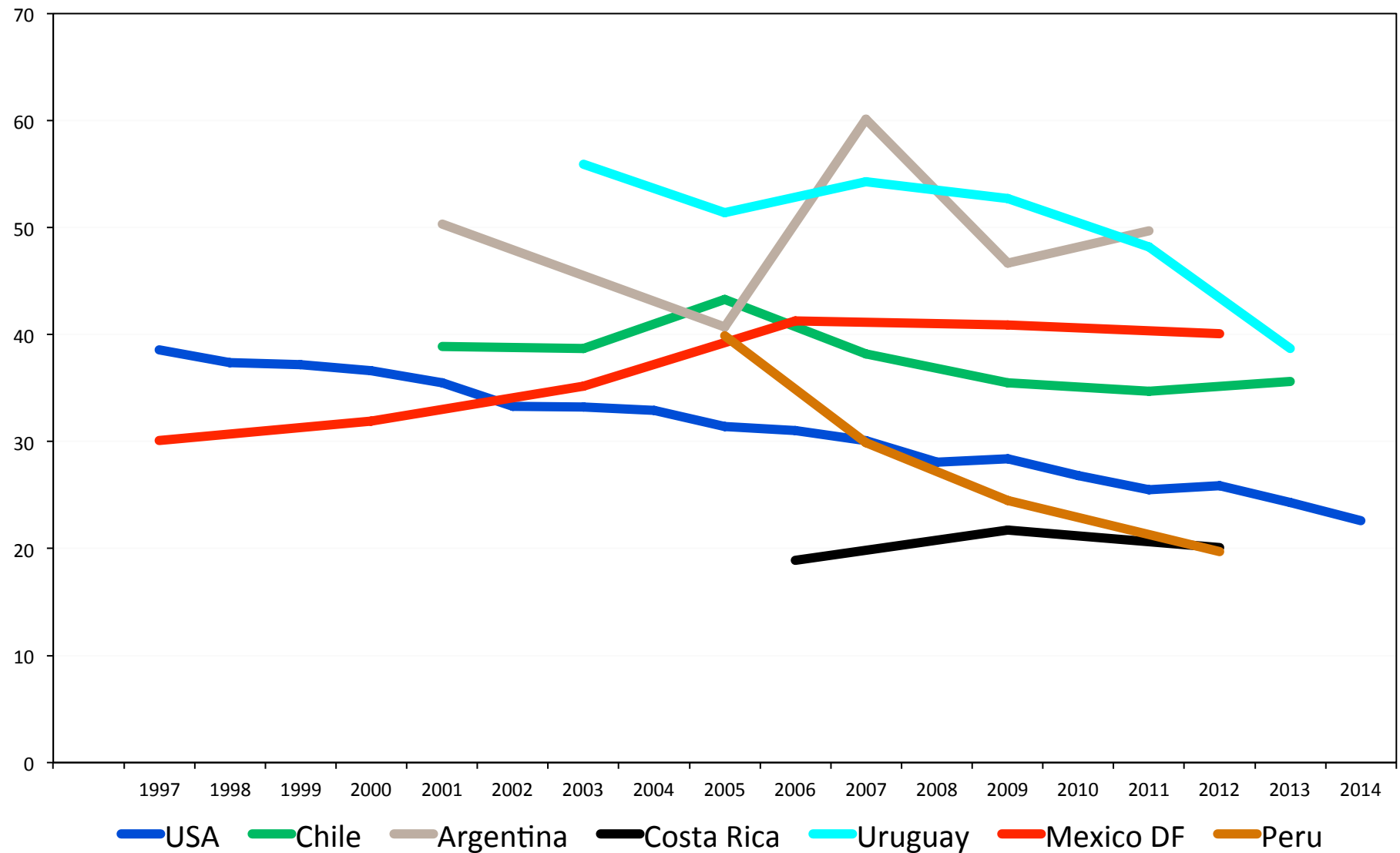


**Past month prevalence of alcohol use
among
Secondary school students**

Trends in past month alcohol use, secondary school students



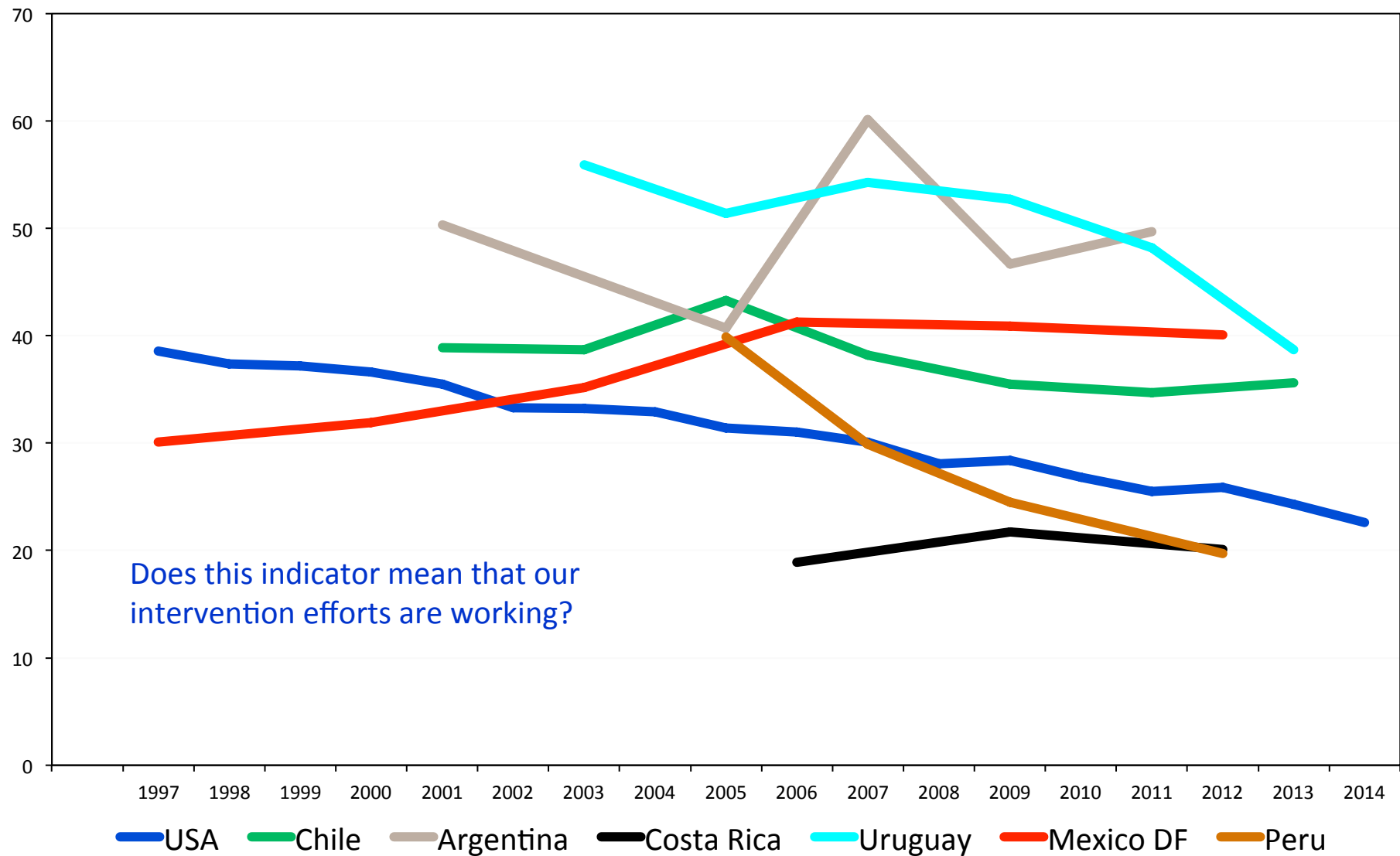
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Trends in past month alcohol use, secondary school students



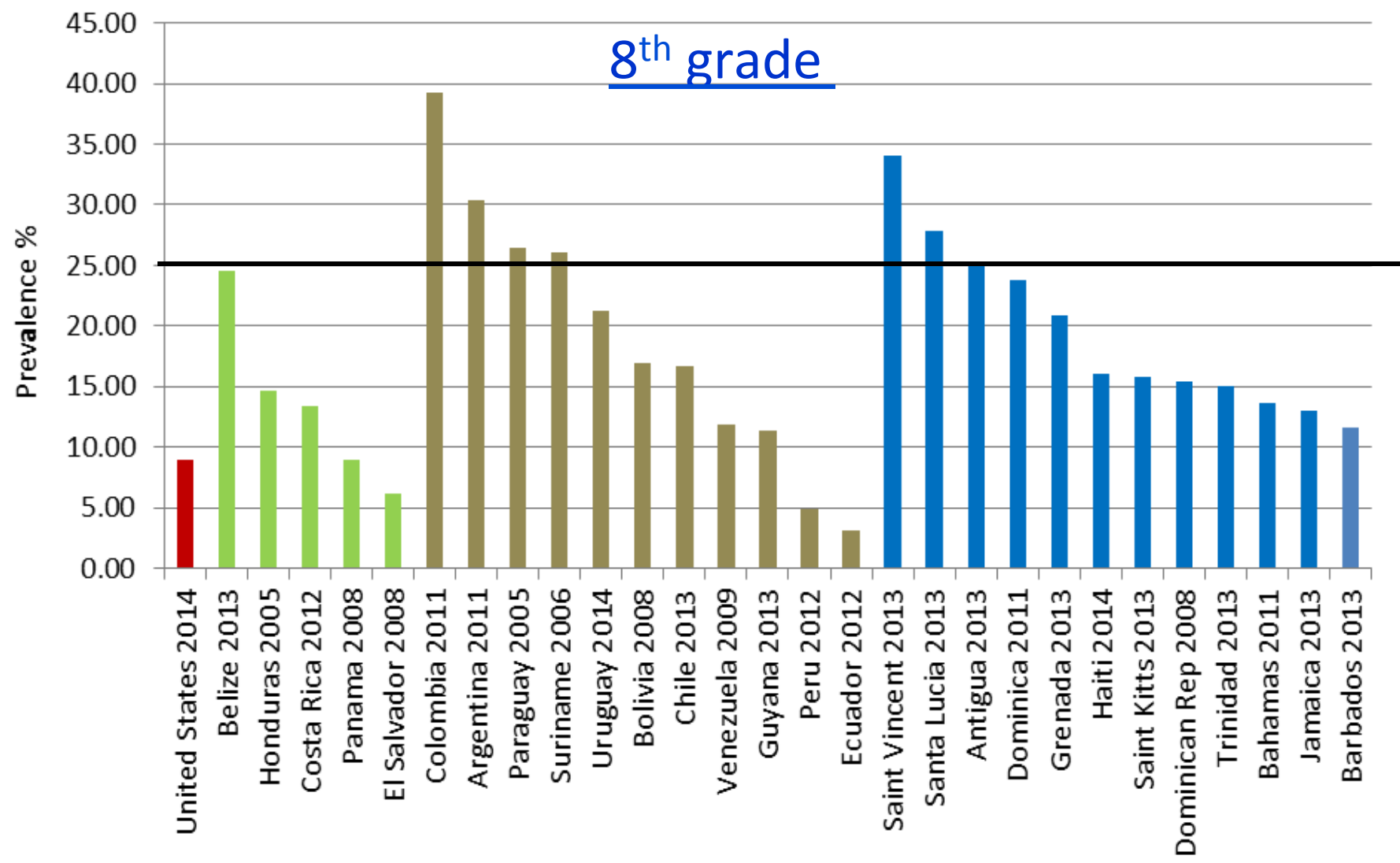
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Past month prevalence of alcohol among 8th graders



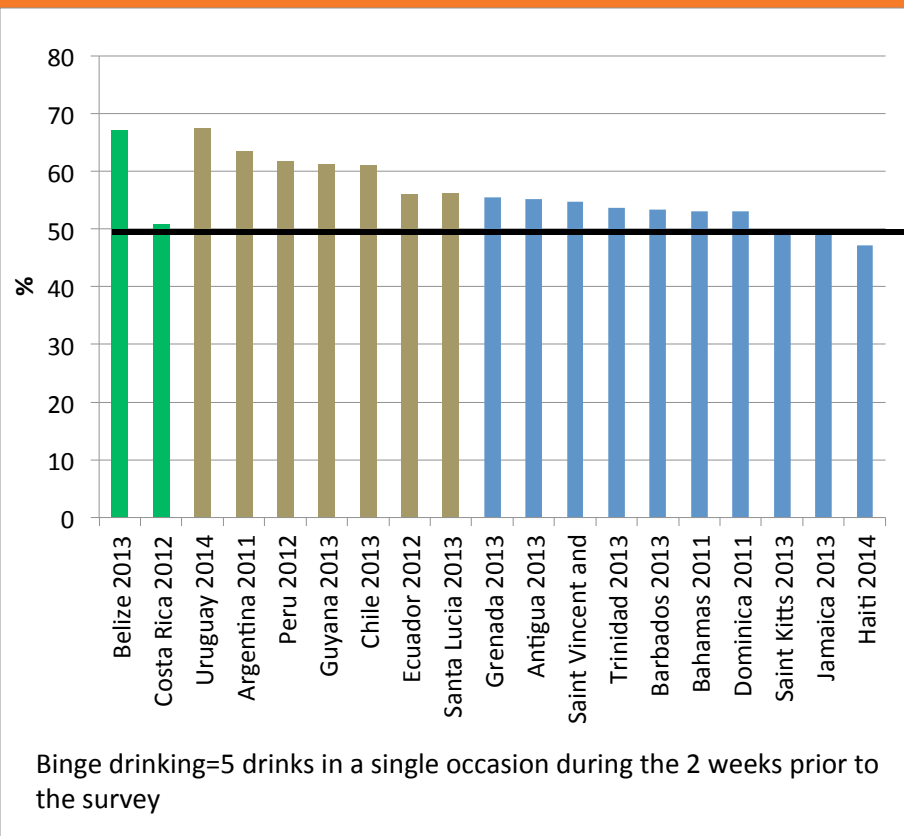
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“Binge drinking” (among past month users)



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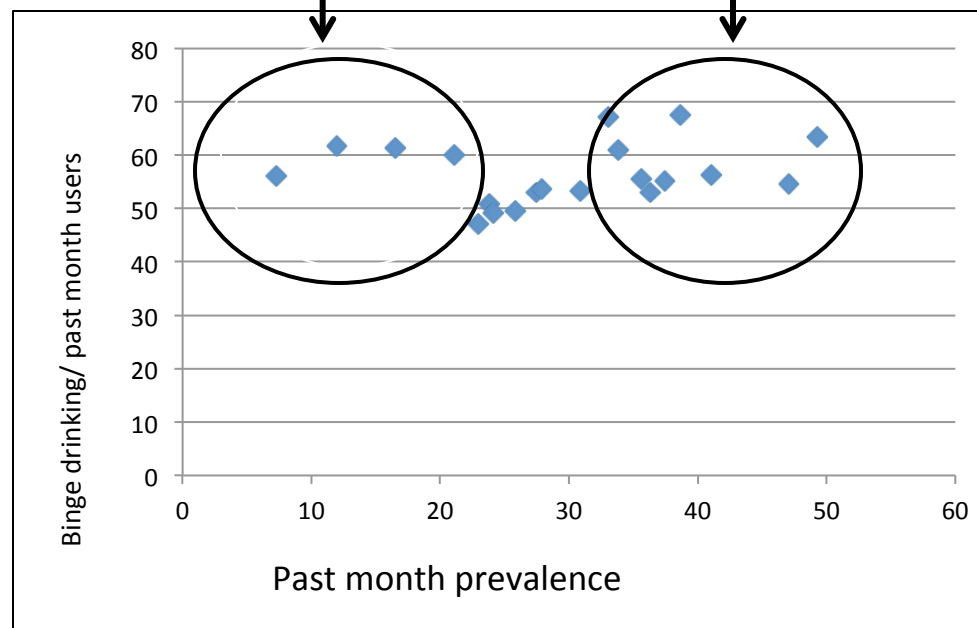


1 out of 2 past month users

Countries with low prevalence

Countries with high prevalence

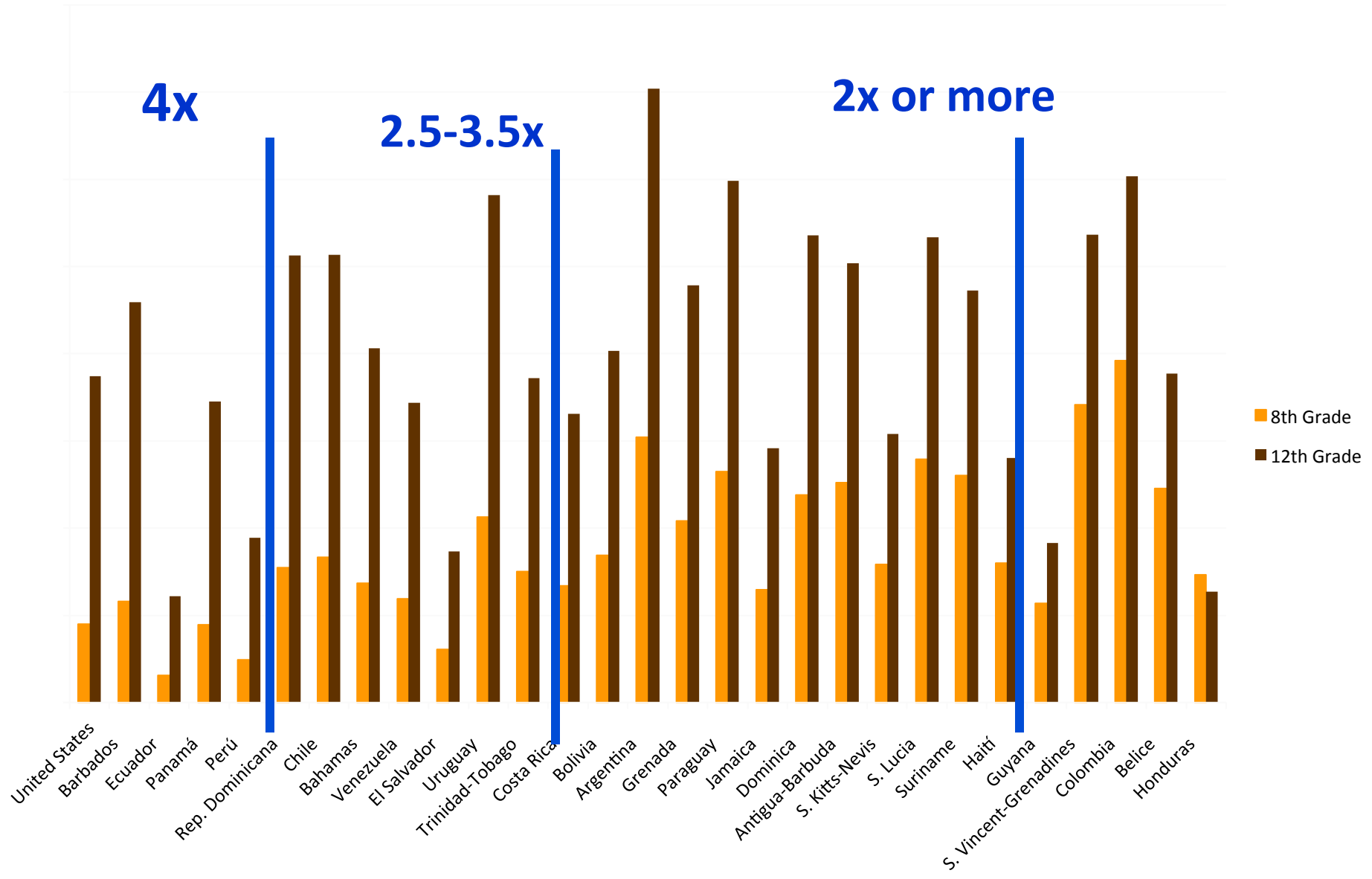
Implications for selective and indicated intervention???



Increase in past month alcohol use 8th grade to 12th grade



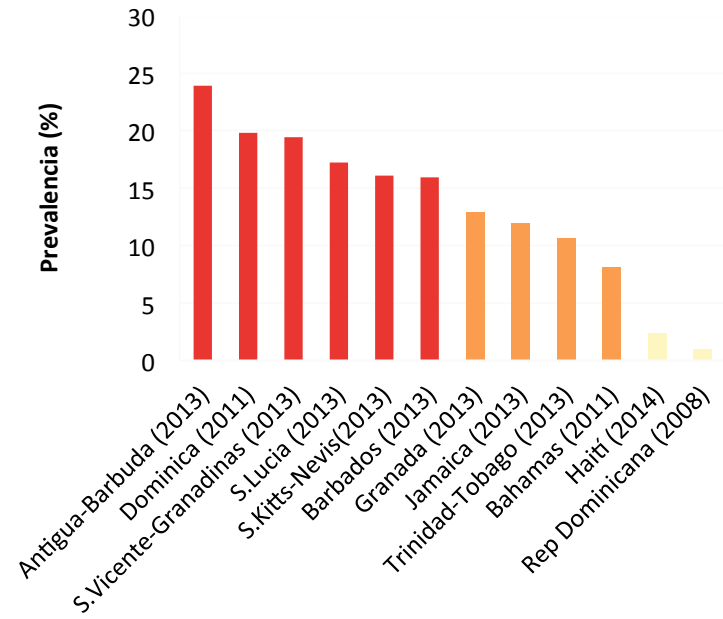
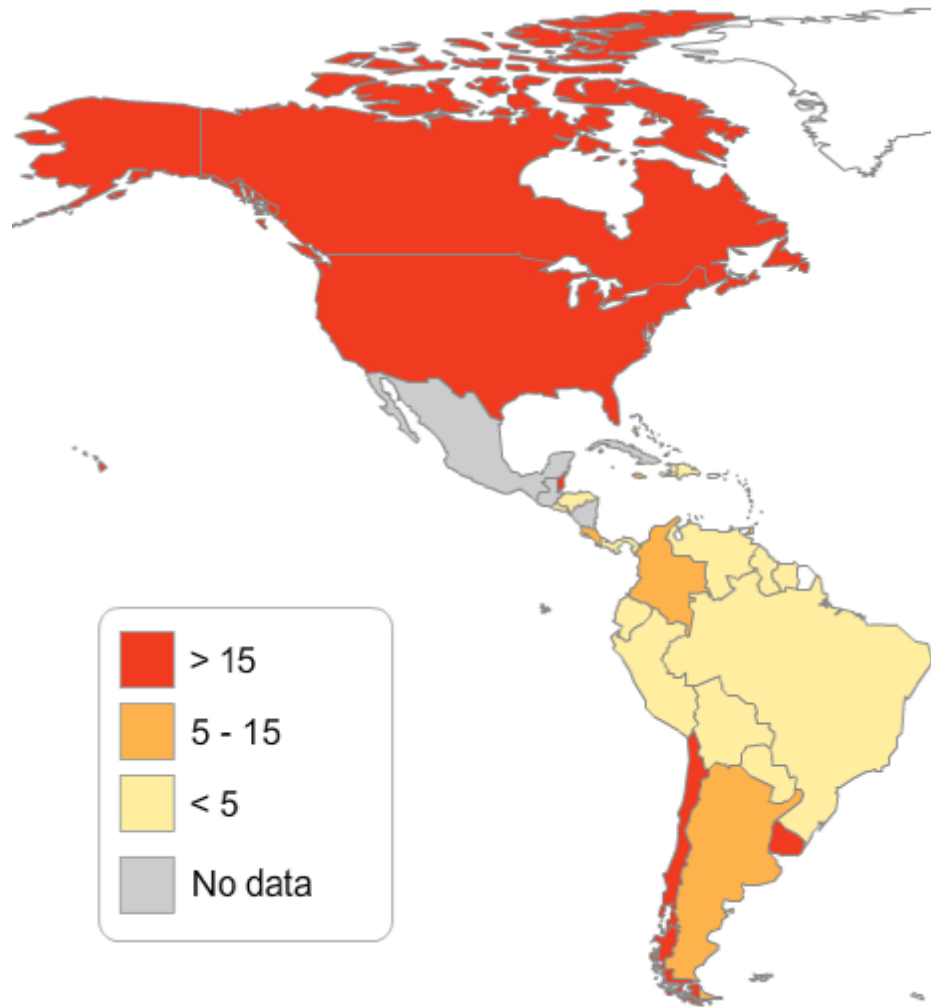
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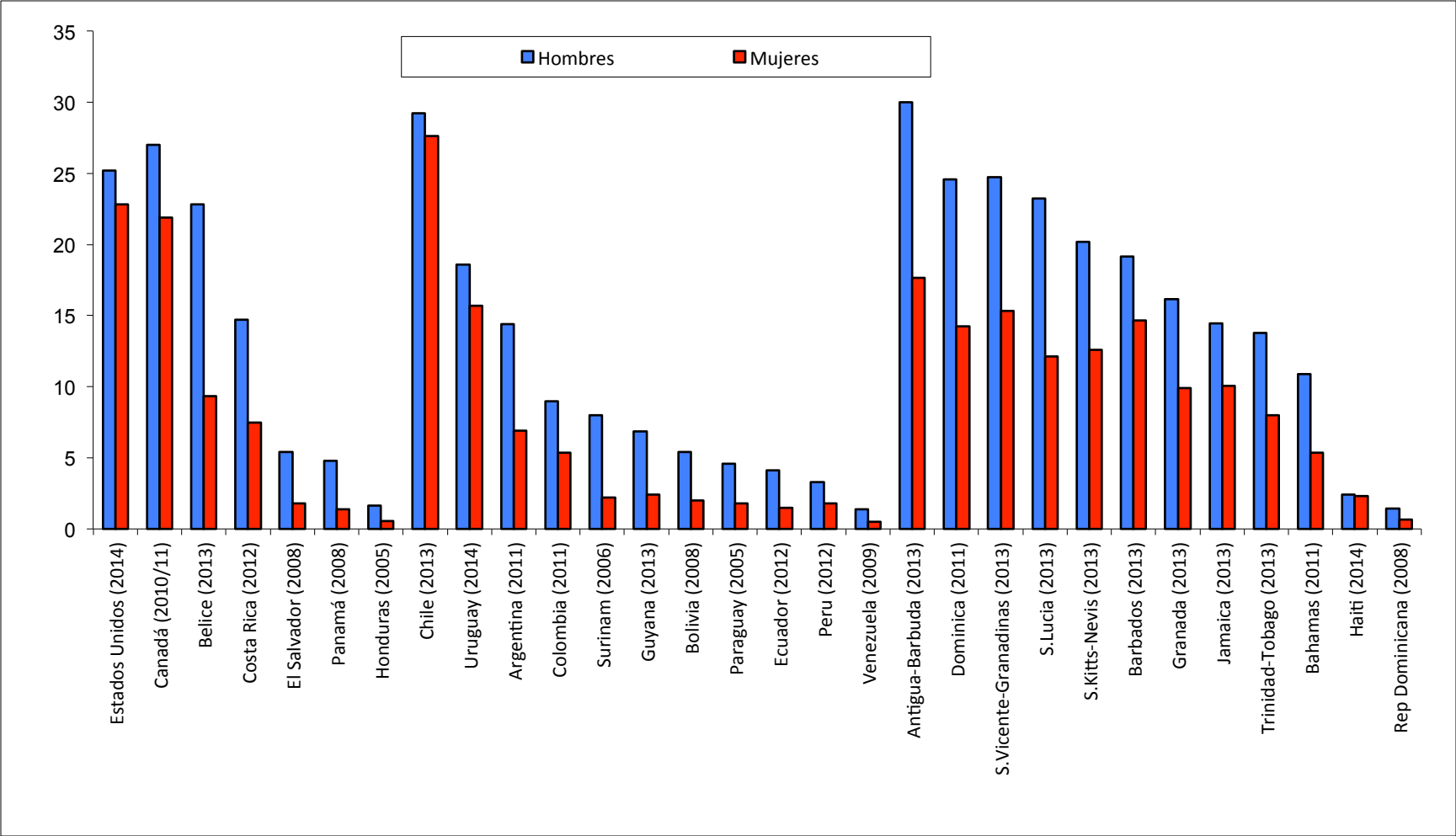
Marijuana—Past year prevalence, secondary school students



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Past year prevalence of marijuana use secondary schools, by sex, according to sub-region.

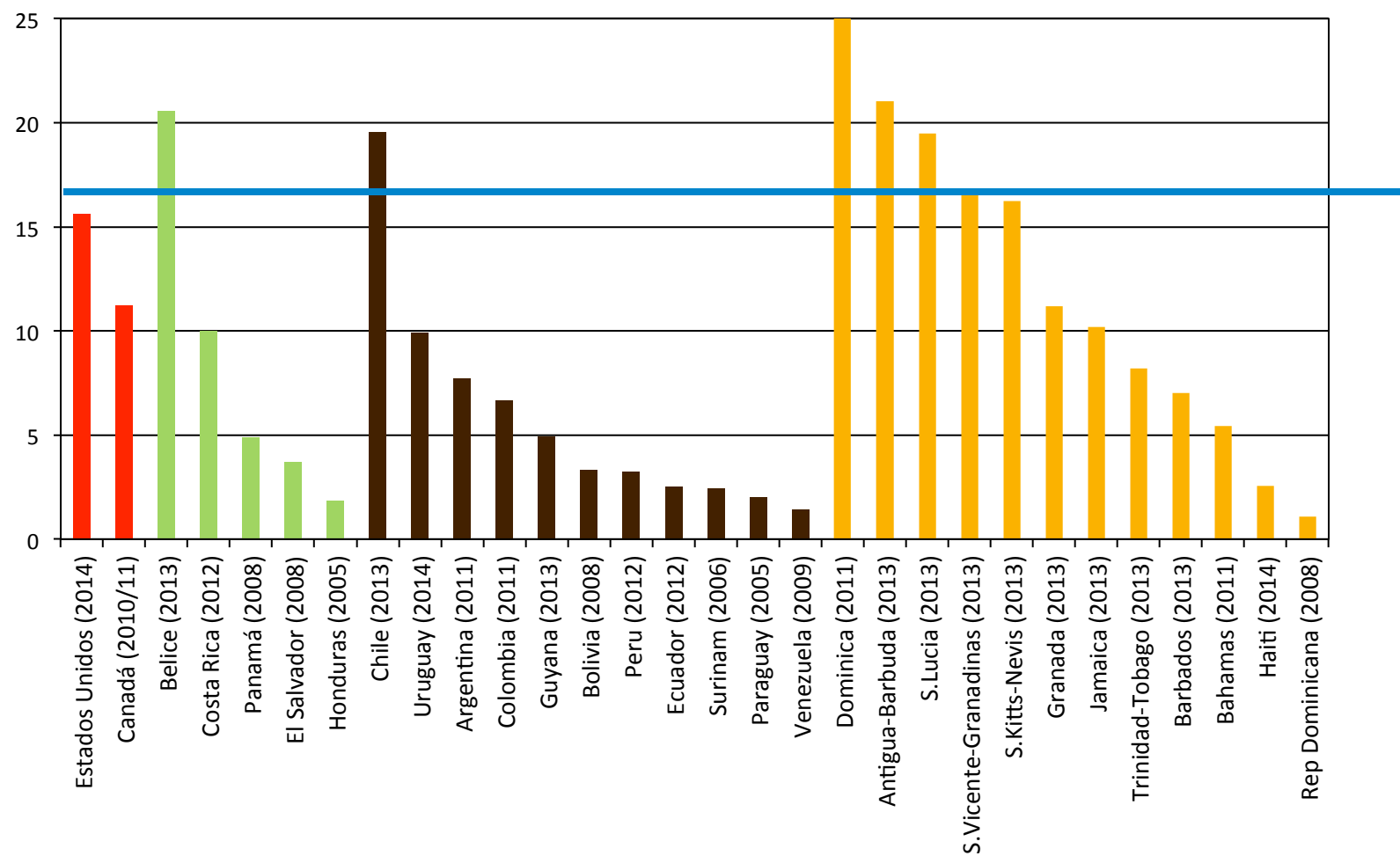


Past year prevalence of marijuana 8th graders by sub-region



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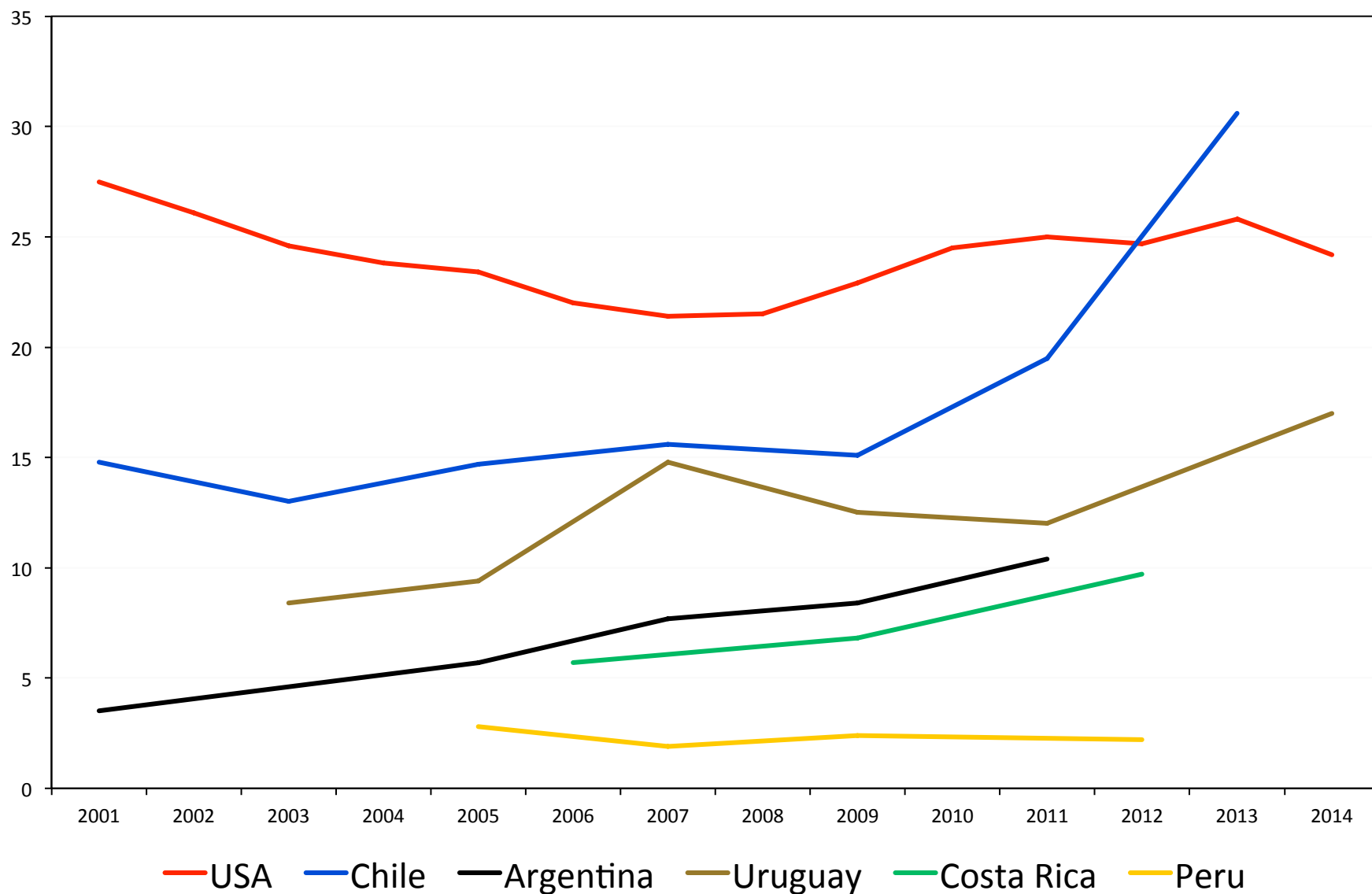
8th grade



Trends in past year marijuana, secondary schools



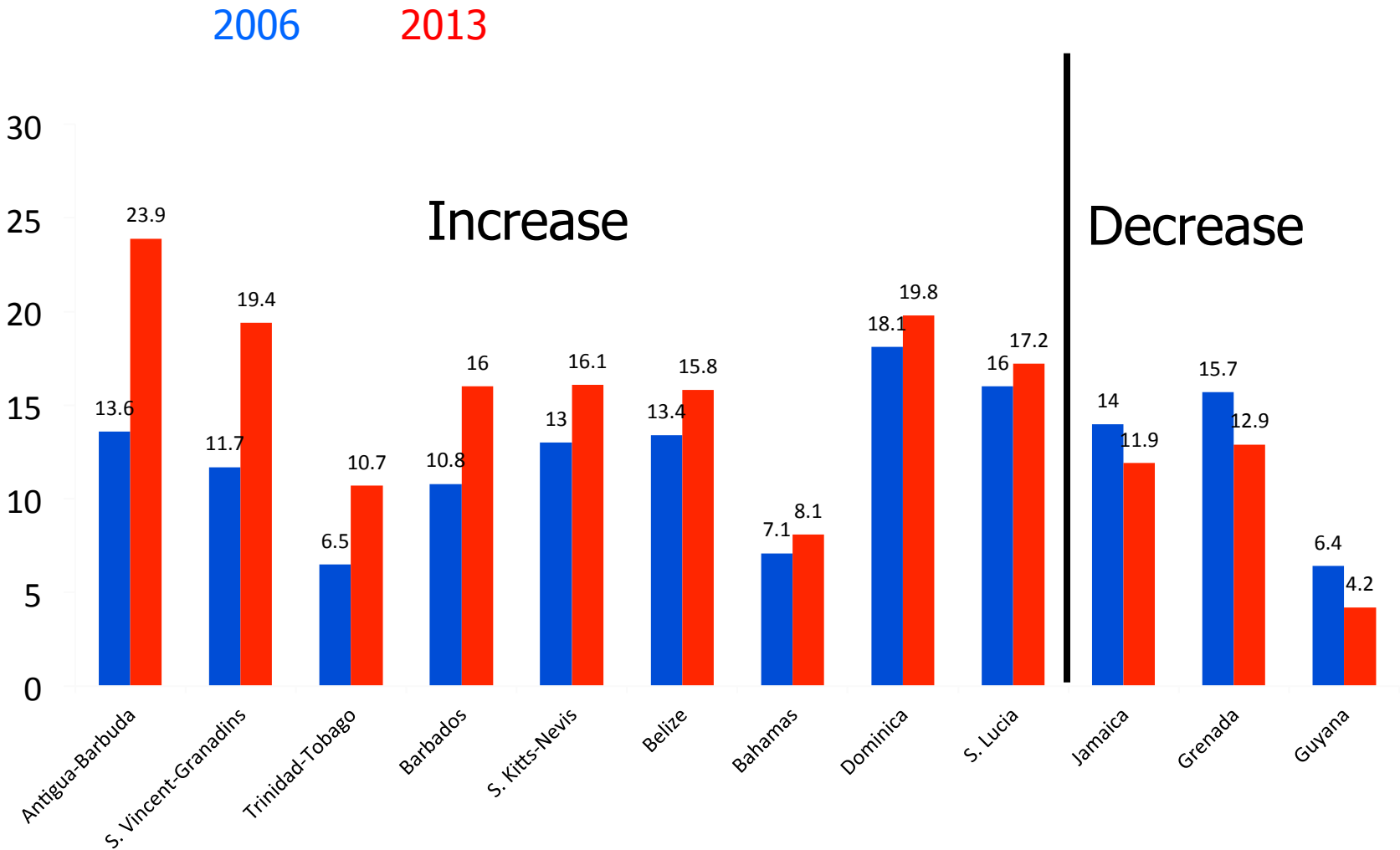
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Comparison, past year marijuana use, Caribbean

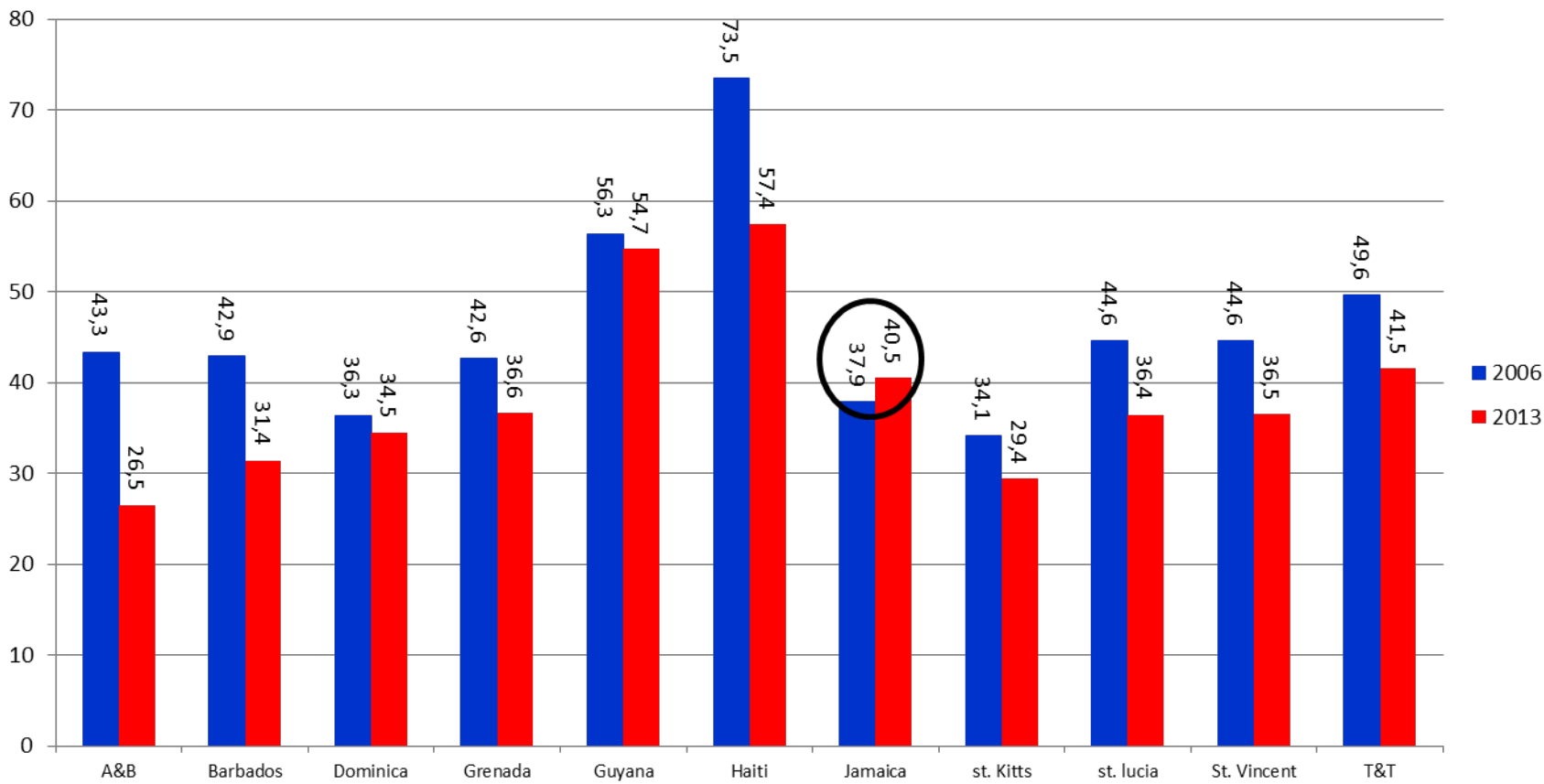


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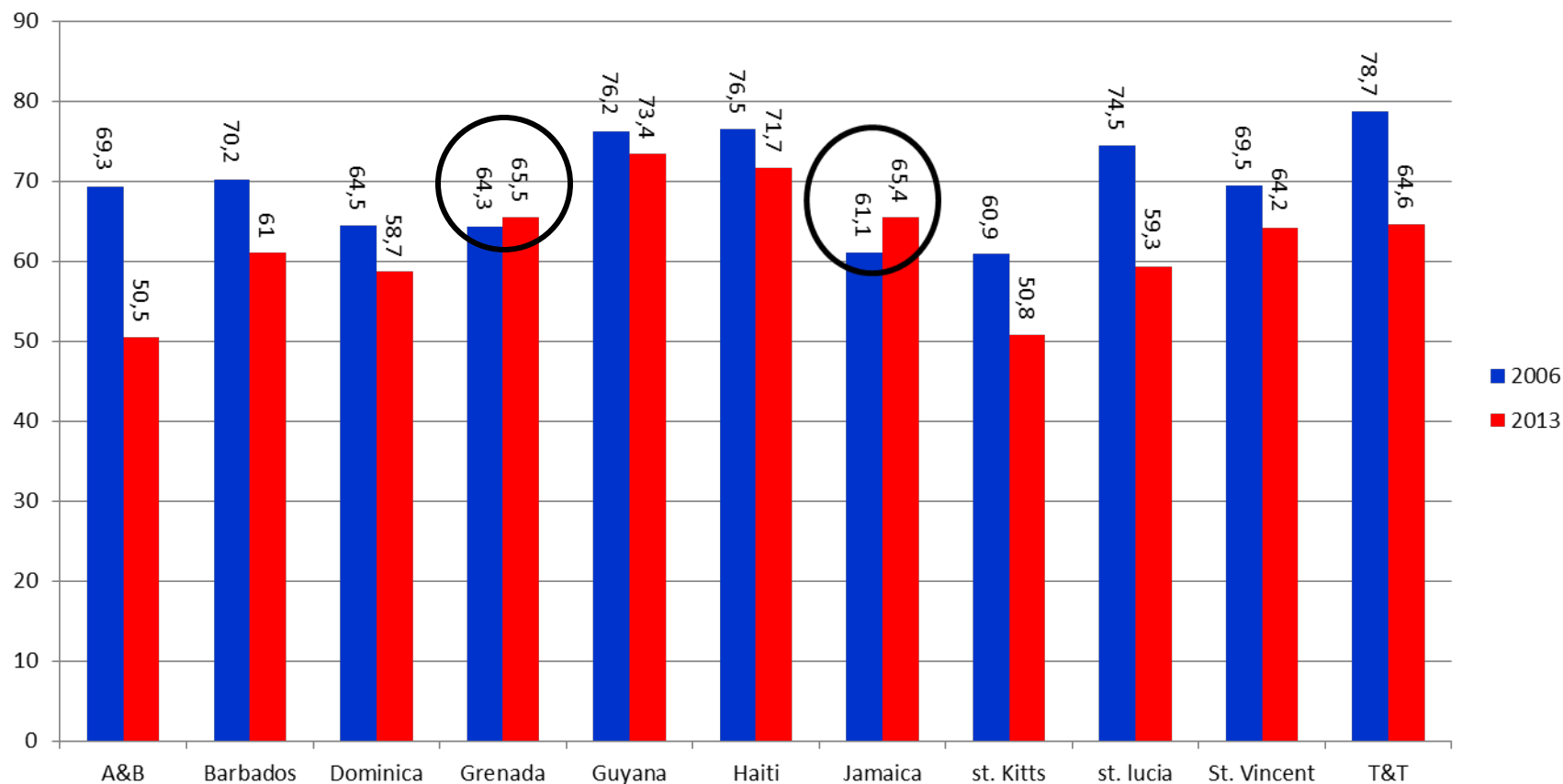




Perception of risk for smoking marijuana sometimes (% of students), Caribbean

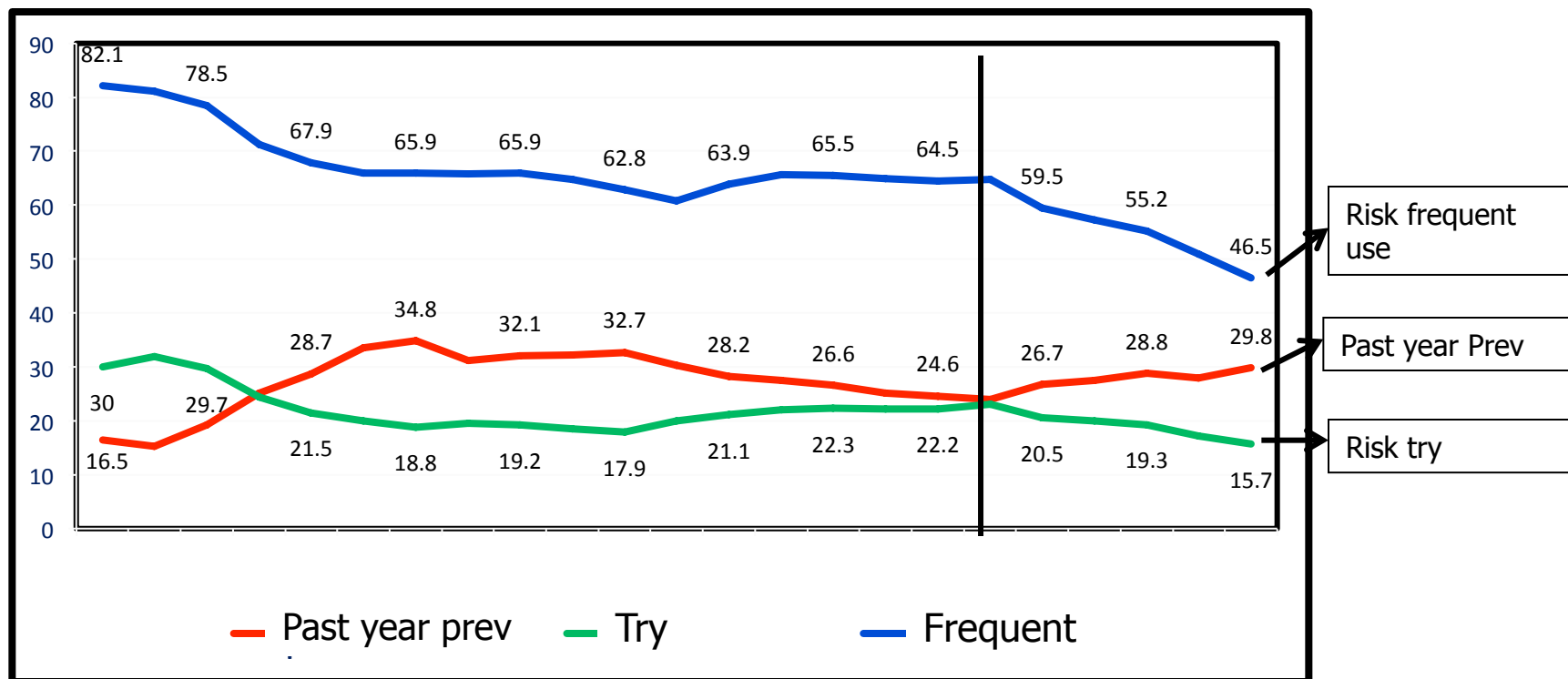


Perception of high risk in smoking marijuana regularly (% of students), Caribbean





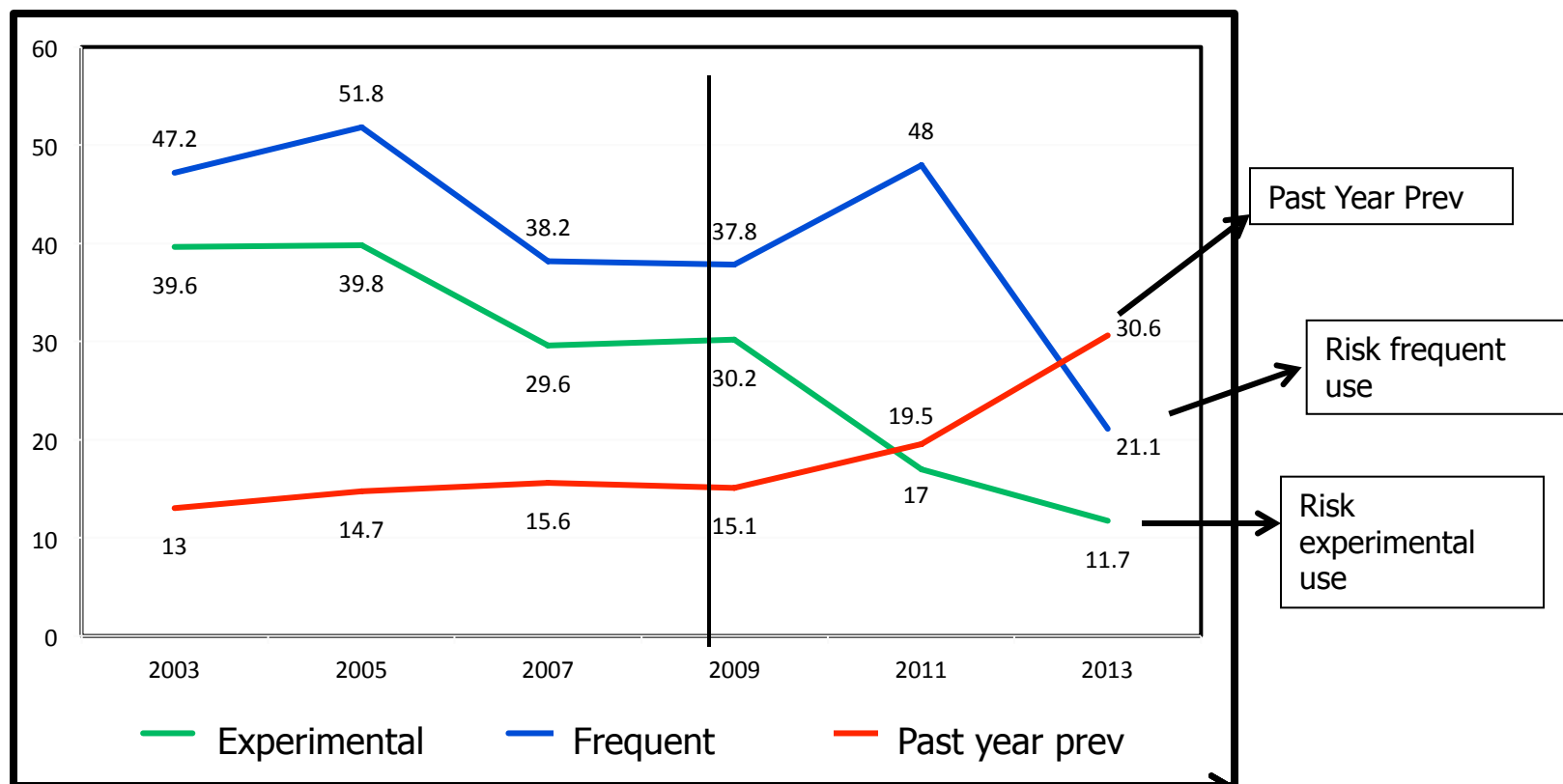
Past year prevalence and perception of high risk, USA, Grade 10



Source: University of Michigan, Monitoring the Future Study, 2013

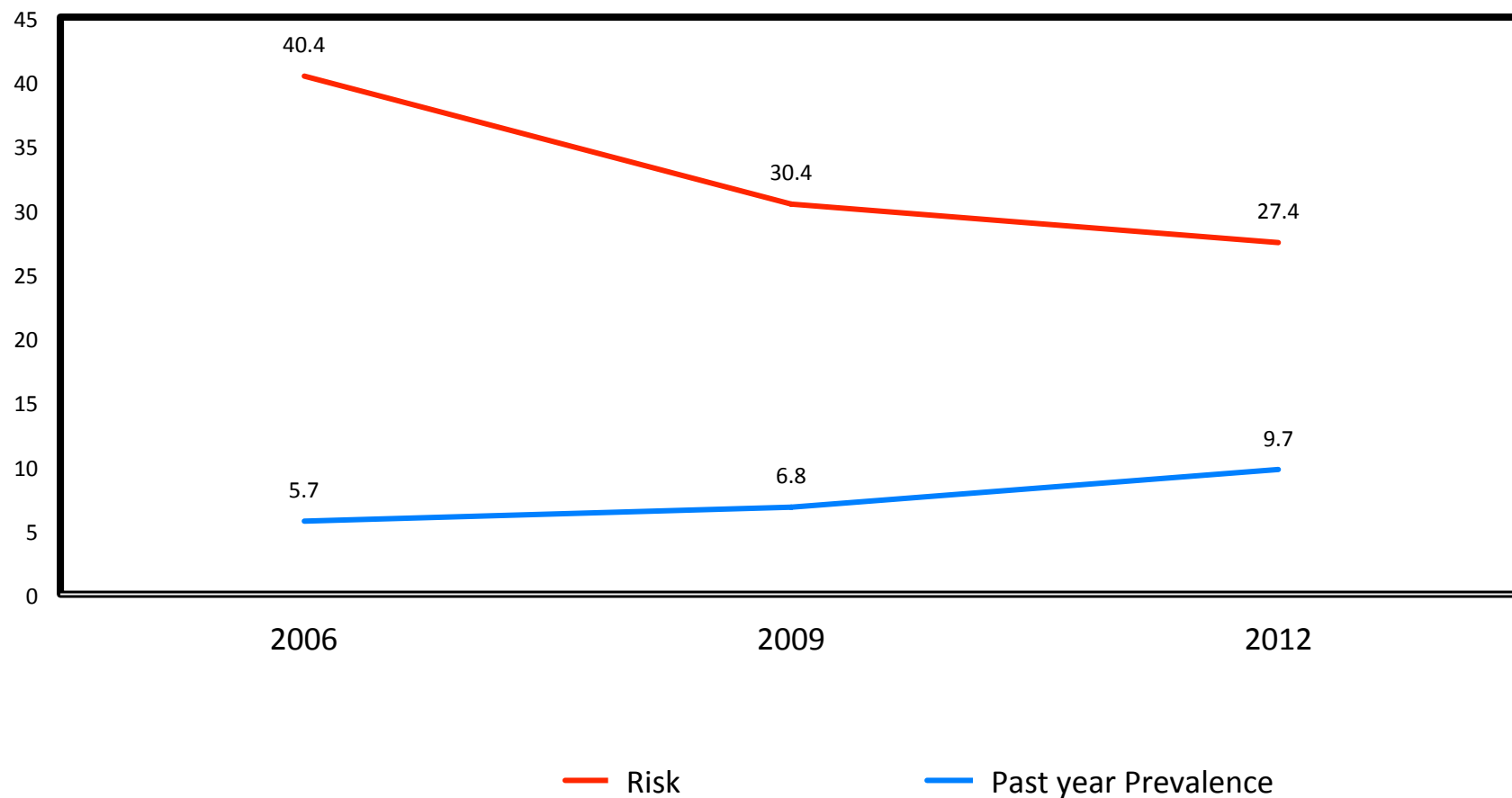


Percent that considers high risk associated with marijuana use and past year prevalence, Secondary Schools, Chile, 2003-2013

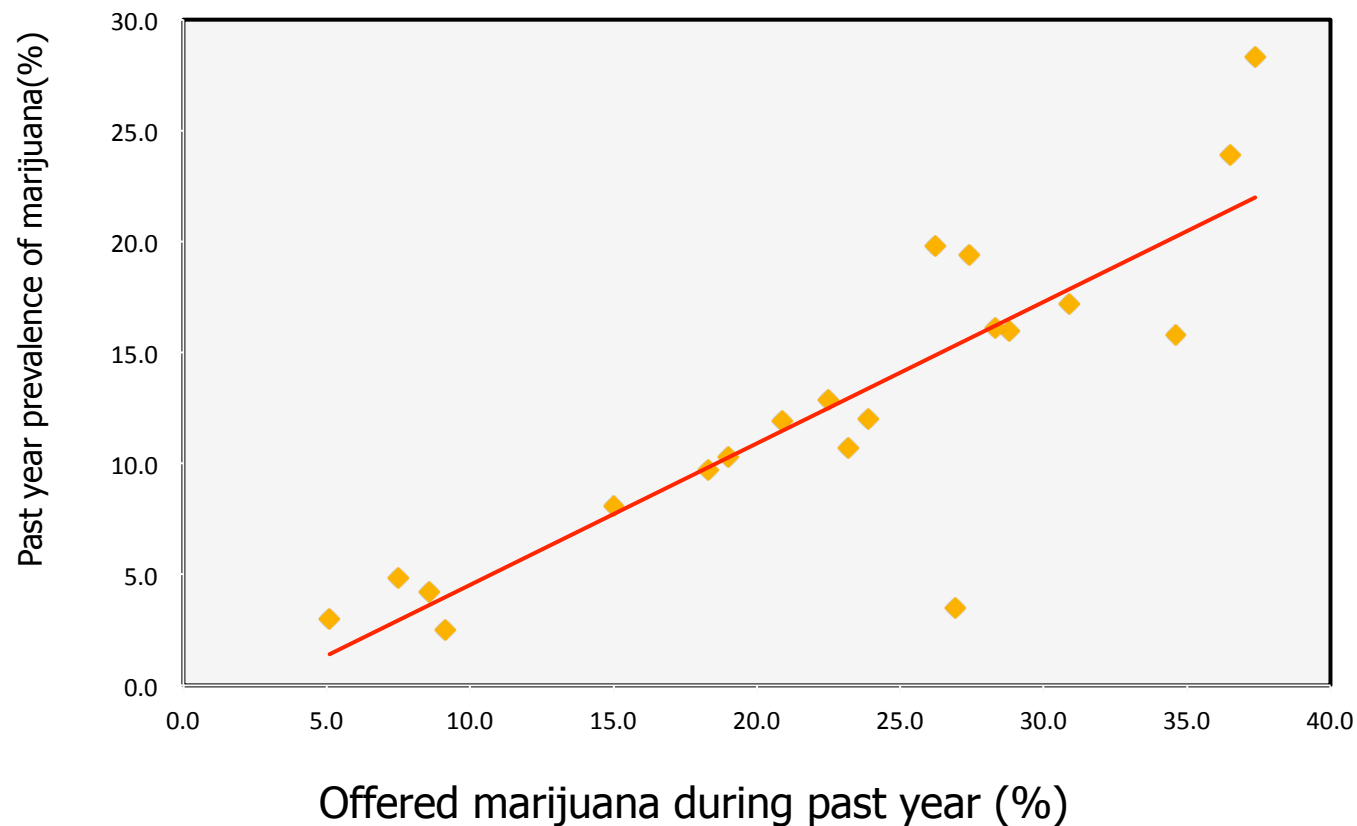




Costa Rica: past year prevalence of marijuana, according to perception of high risk of using sometimes, Secondary schools



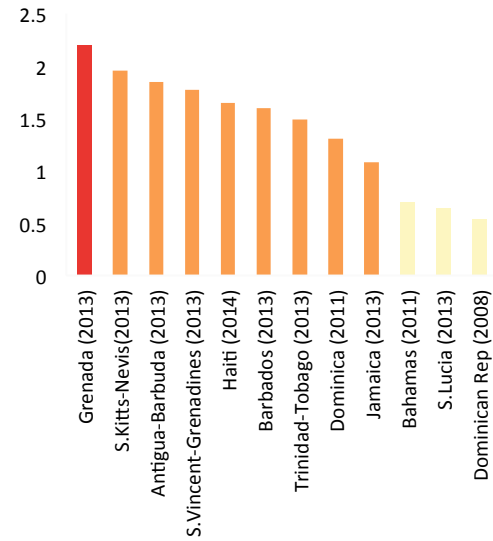
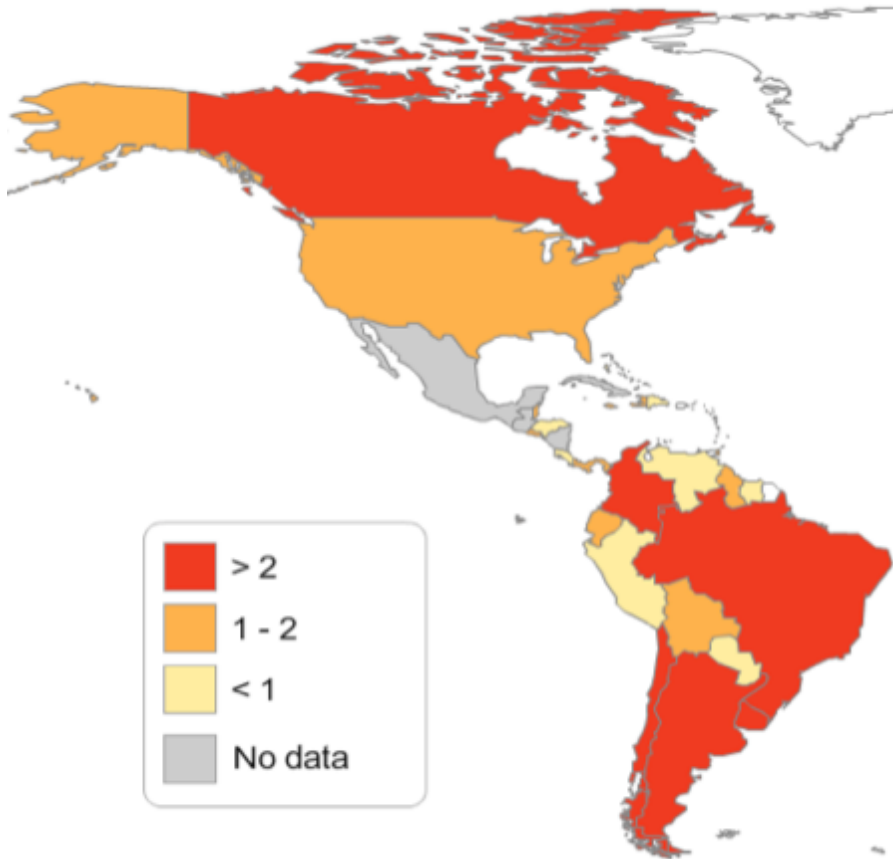
Secondary school: past year prevalence of marijuana as a function of having been offered marihuana during the past year, multiple countries



Past year cocaine, secondary school



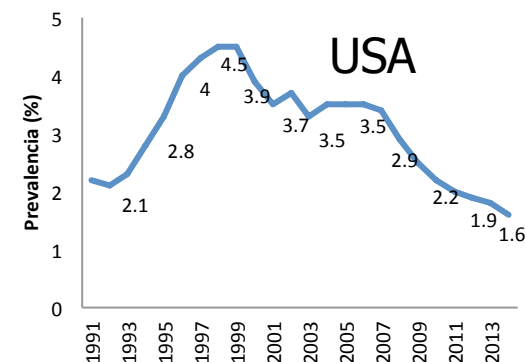
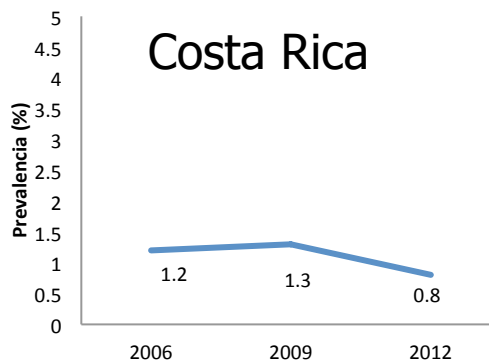
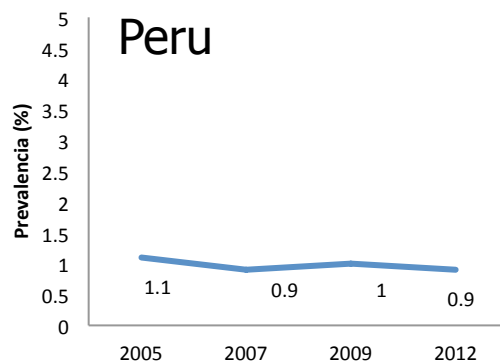
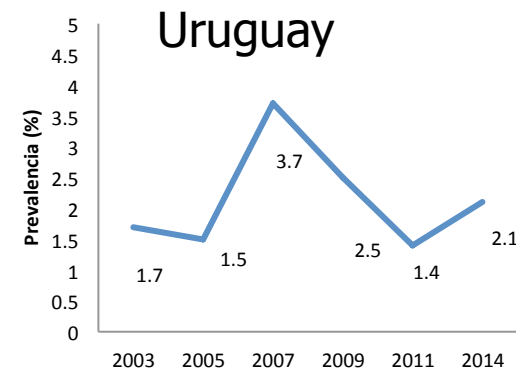
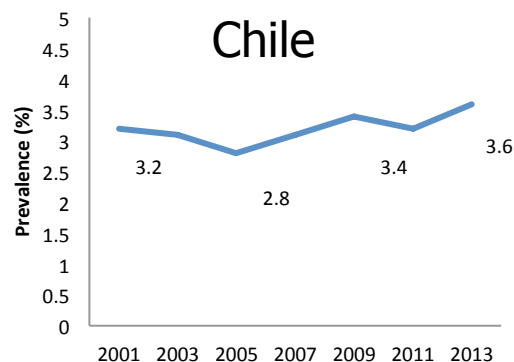
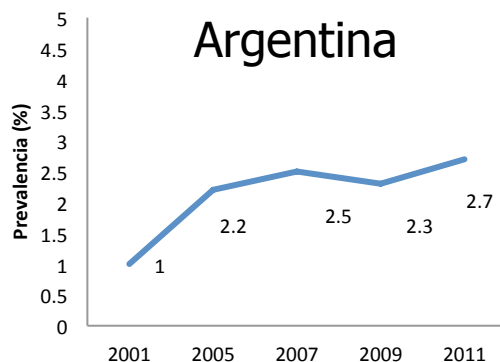
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Past year cocaine, secondary school



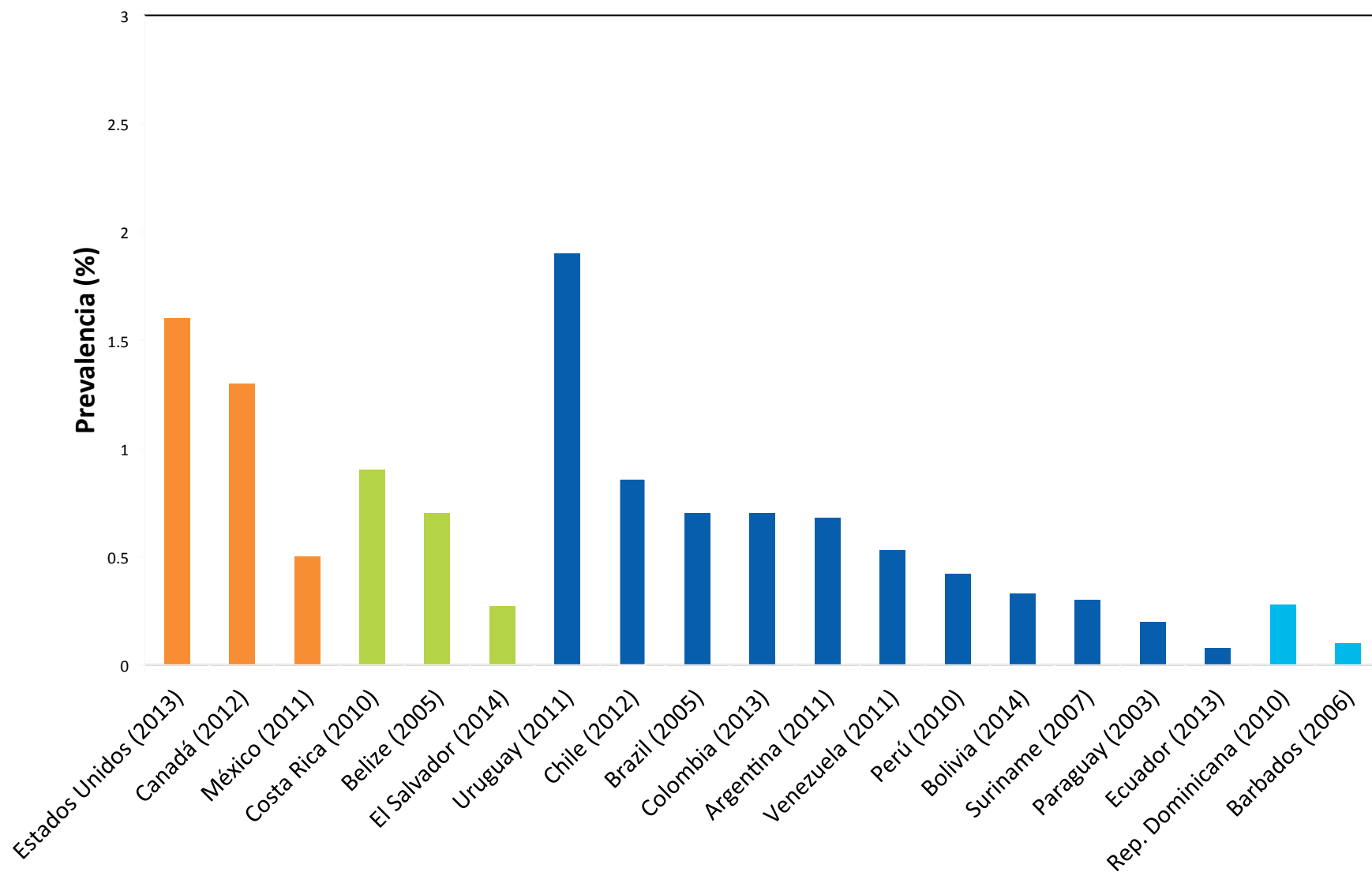
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Past year cocaine, general population



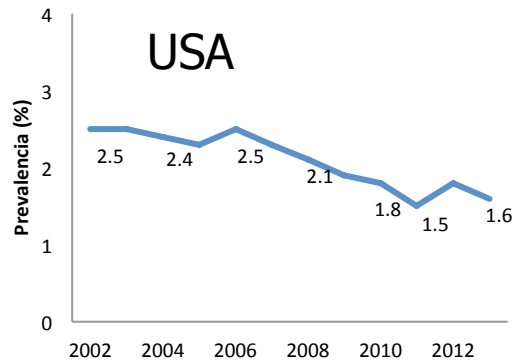
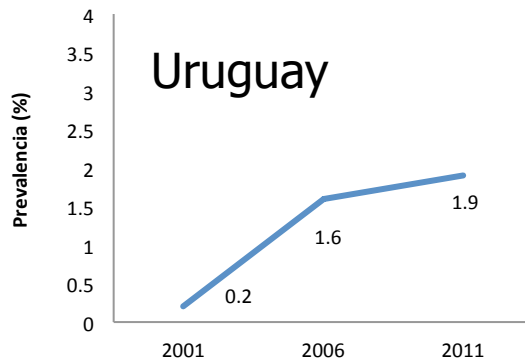
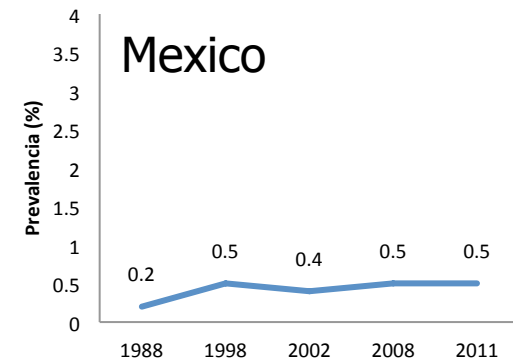
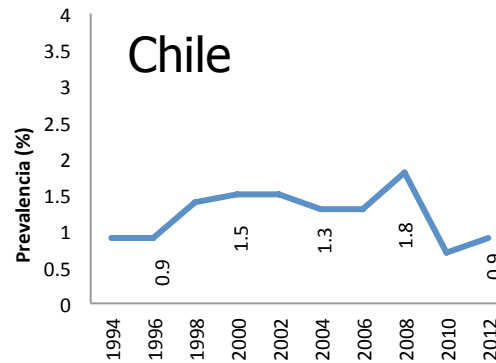
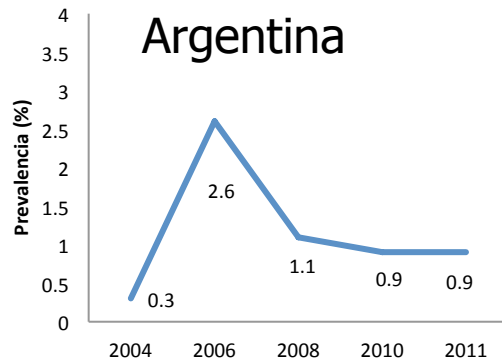
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Past year prevalence cocaine, general population



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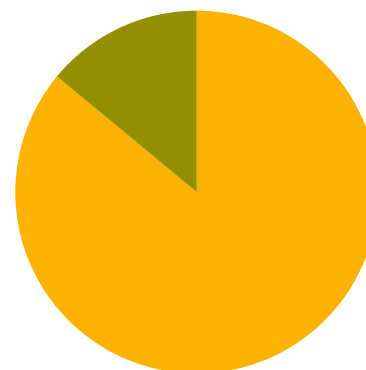




The role of adulterants

Most is adulterated

- Adulterants play a key role in the addictive process.
- Most cocaine and smokable cocaines are highly adulterated.

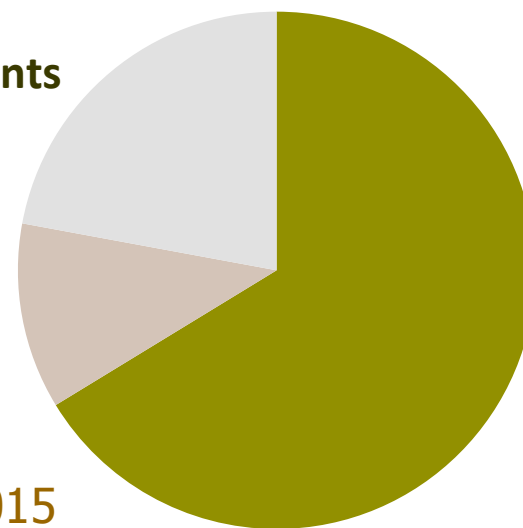


■ Adulterated

■ Not adulterated

Primary adulterants

■ Caffeine
■ Phenacetin
■ Caff + Phen

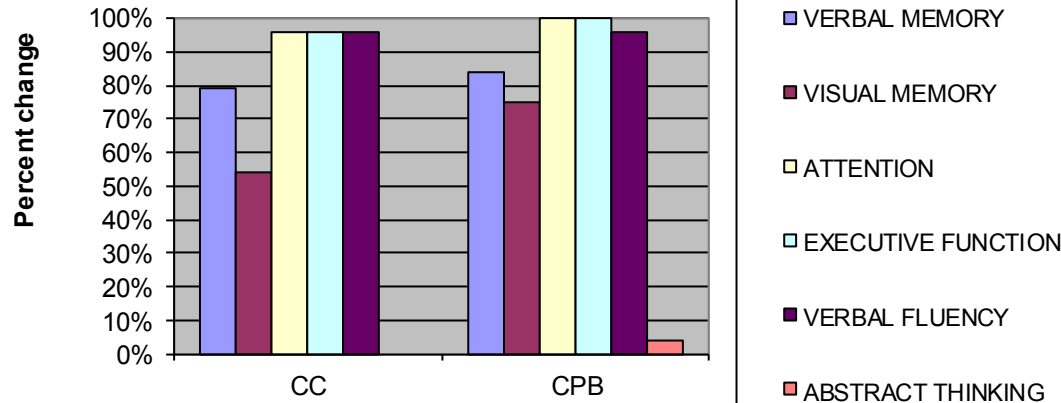


Impact on cognition



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CHANGED COGNITIVE DOMINION

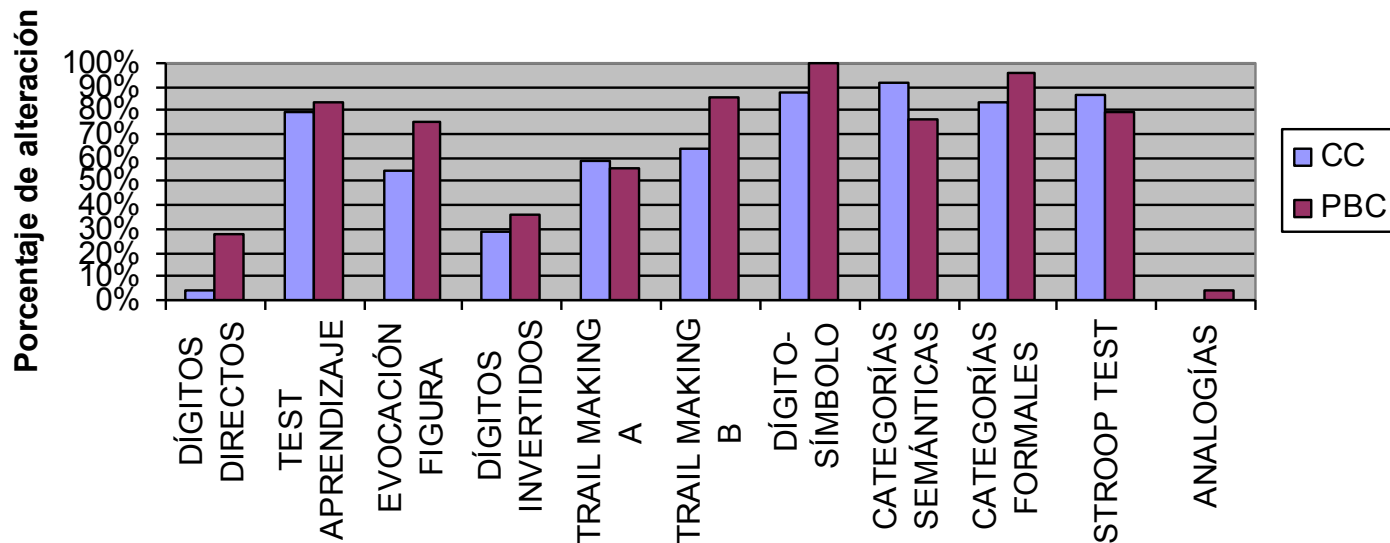


25 CBP (mean age 26.7 ys,
Ed Form 8.1 a)

24 CC (mean age 27.1 ys, Ed
Form 10.2 a)

Silveira A, Ferrando R y col.

TESTS NEUROPSICOLÓGICOS



Changes in cerebral diffusion following abstinence

- 22 active users (6 CC, 16 PBC)
 - 20 users in abstinence (6 CC, 14 PBC). 1-8 months, median 2.6 m.
 - 22 controls
- ANOVA, $p < 0.001$.

Ferrando R y col. Aceptado en SNMMI 2015

Recuperation of function took 8-10 months longer for smokable cocaine users than for regular cocaine users.

Implications for treatment? Long term health outcomes?

Implications for Recovery



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- The drug's chemical composition is an important factor in addiction and recovery
 - Impact critical cognitive areas
 - More severe among CBP users than cocaine users
 - Route of administration may be determining factor (nasal vs smoked)
 - Certain adulterants (e.g. caffeine) may contribute to the addictive effect and to differences with cocaine
 - May be related to aggressive behavior
- Recovery time varies by substance
 - Longer abstinence for smokable cocaine users than cocaine users
 - Important role of adulterants



Heroin



2004

2014

- New psychoactive substances
- Pharmaceutical use without medical prescription
- Opioids and opiates



Diverse problems = Diverse responses

- Substances, patterns of use, adulterants and chemical composition vary.

Therefore...

- We must monitor to understand the patterns (who, what, where, when, why and how of use)
- We must develop interventions based on the information of the problem at hand and the relevant health issues for the population.
- We must evaluate our outcomes.



What does science tell us about effective prevention efforts?

- Family (parent training, support psychosocial dev)
- School settings (Life skills; and GB Game)
- Recreation/ Leisure approaches
- Mass Media (NOT effective as stand alone).
- Community (Communities that care)
- Environment, legislation, regulation (prices, prohibition of sales, smoke free public places, advertisement restrictions)



Does this diverse set of settings and outcomes call into question the effectiveness of prevention

- No, different prevention measures alter the risk and protective factors in distinct populations in different points of time.
- Prevention of early use appears to be one of the most important predictive variables for later use and dependence, but it is not the only one.

Diverse problems = Diverse responses



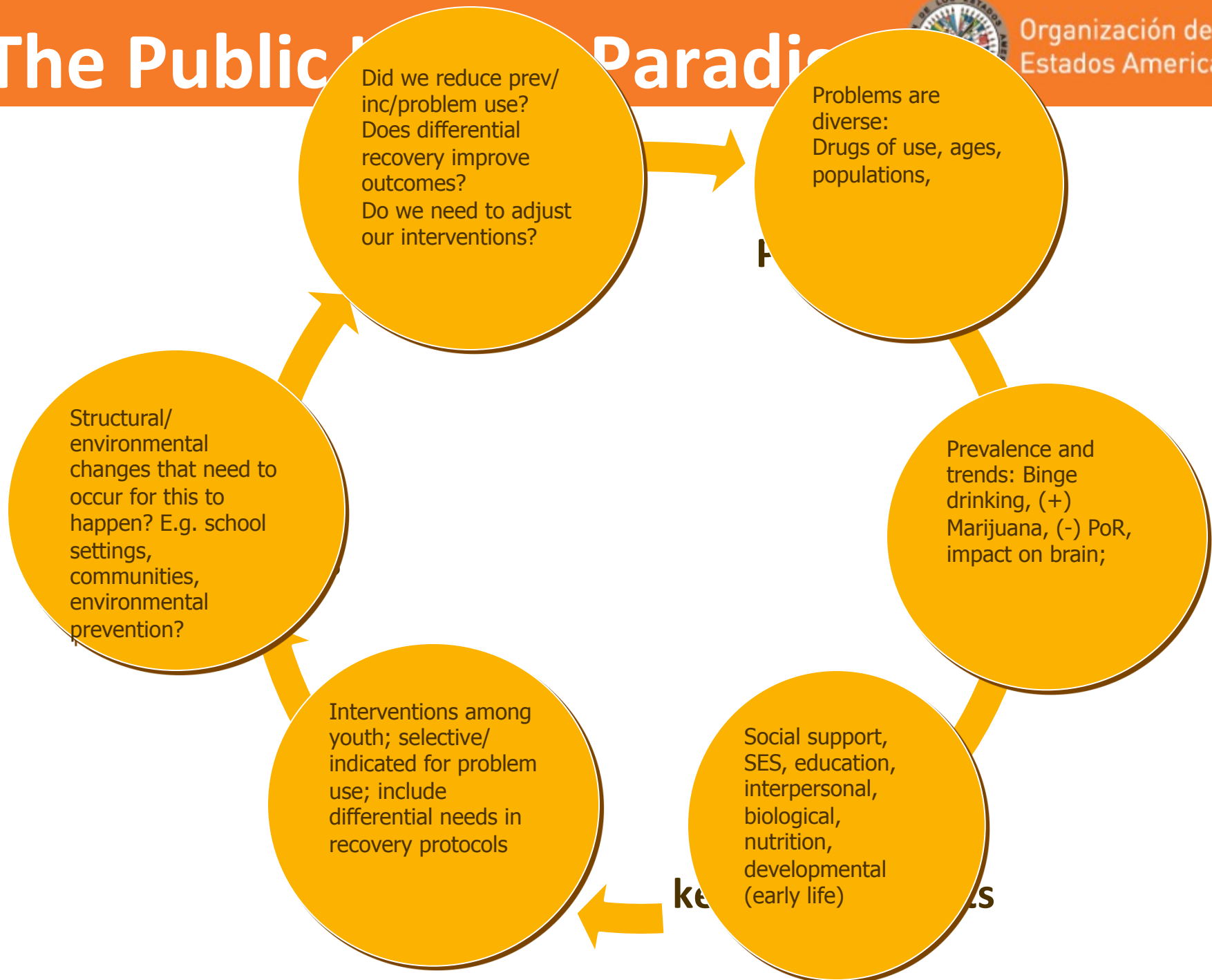
Information for Action

- Diversity across countries
- Early initiation of substance use
- Problematic use (binge drinking)
- Trends over time
- Perception of risk
- Relationship between interventions and outcomes
- Adulteration of substances.

The Public Health Paradigm



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- Acknowledgements:
 - The National Observatories on Drugs and related entities.

Without whose work, we would not be able to provide the panorama that we have today.



Thank you!

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