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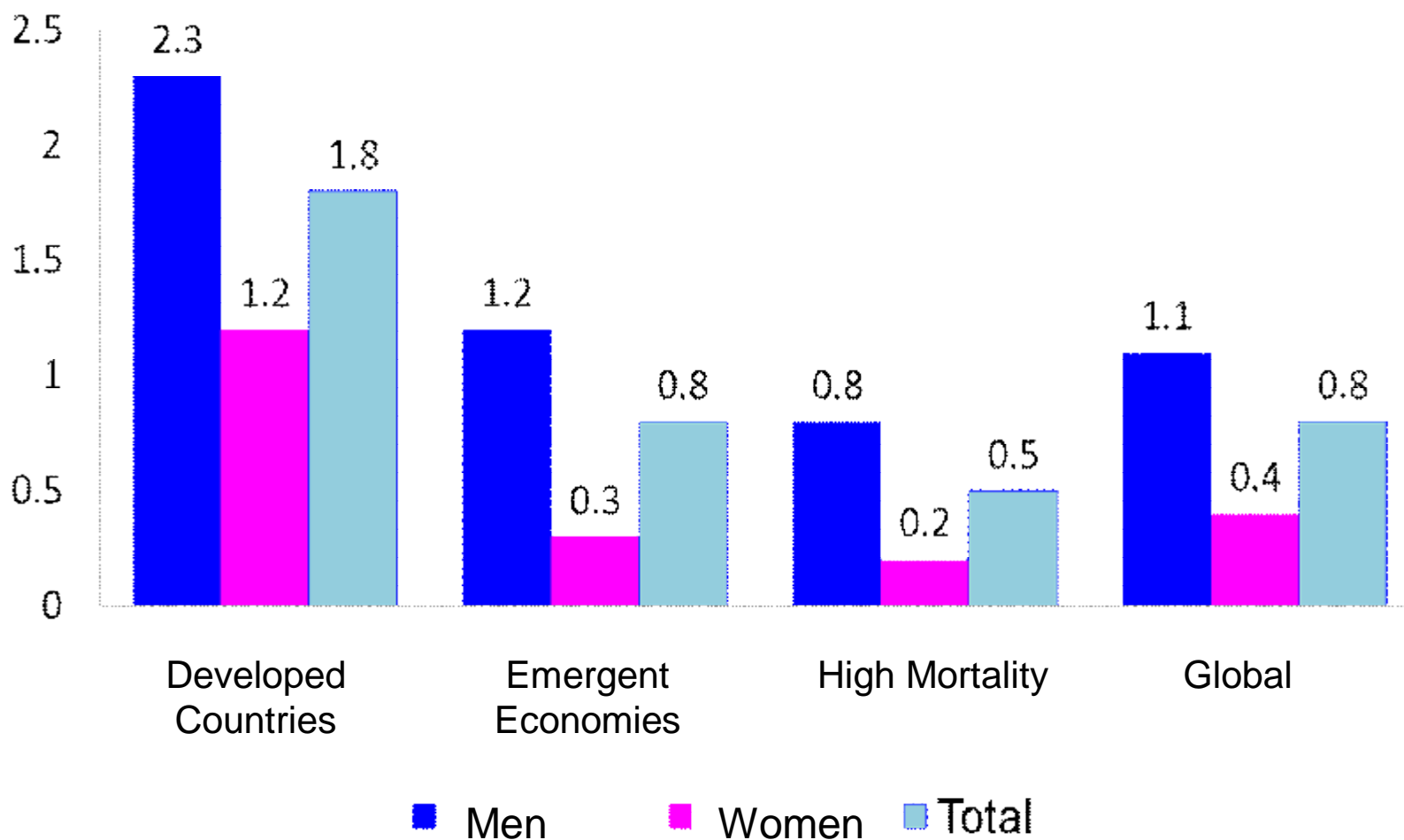
An outlook of drug consumption and associated problems: the public health perspective

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XI Reunión del Grupo de Expertos en Reducción de la Demanda CICAD
México, D.F. 29 de septiembre de 2009



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Illegal drug use attributable burden of disease



J. Rehm et al. Drug and alcohol Review. 25, 503-513. 2006.



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Legal drugs: tobacco



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- **5.5 trillions of cigarettes consumed in 2002**
 - 800 by each men, women and children
 - **1 trillion of men smoke**
 - 50% in developing countries
 - 300 million in China
 - **250 million women smoke**
 - **5 million people die every year**
 - **In Mexico: 50,000 annual deaths**



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Tobacco consumption, 2008

Have you ever smoke in your life?	Gender		Group (age)		
	Men	Women	Adolescents	Adults	Total
No	51.2%	76.6%	85.1%	59.8%	64.4%
Yes	48.8%	23.4%	14.9%	40.2%	35.6%

27 million of mexicans had smoke once in their lifetime

The average age at which adolescents smoke for the first time is: 13.7 years old



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Lung cancer mortality in women who smoke, and exposed or not to second-hand smoke in the family

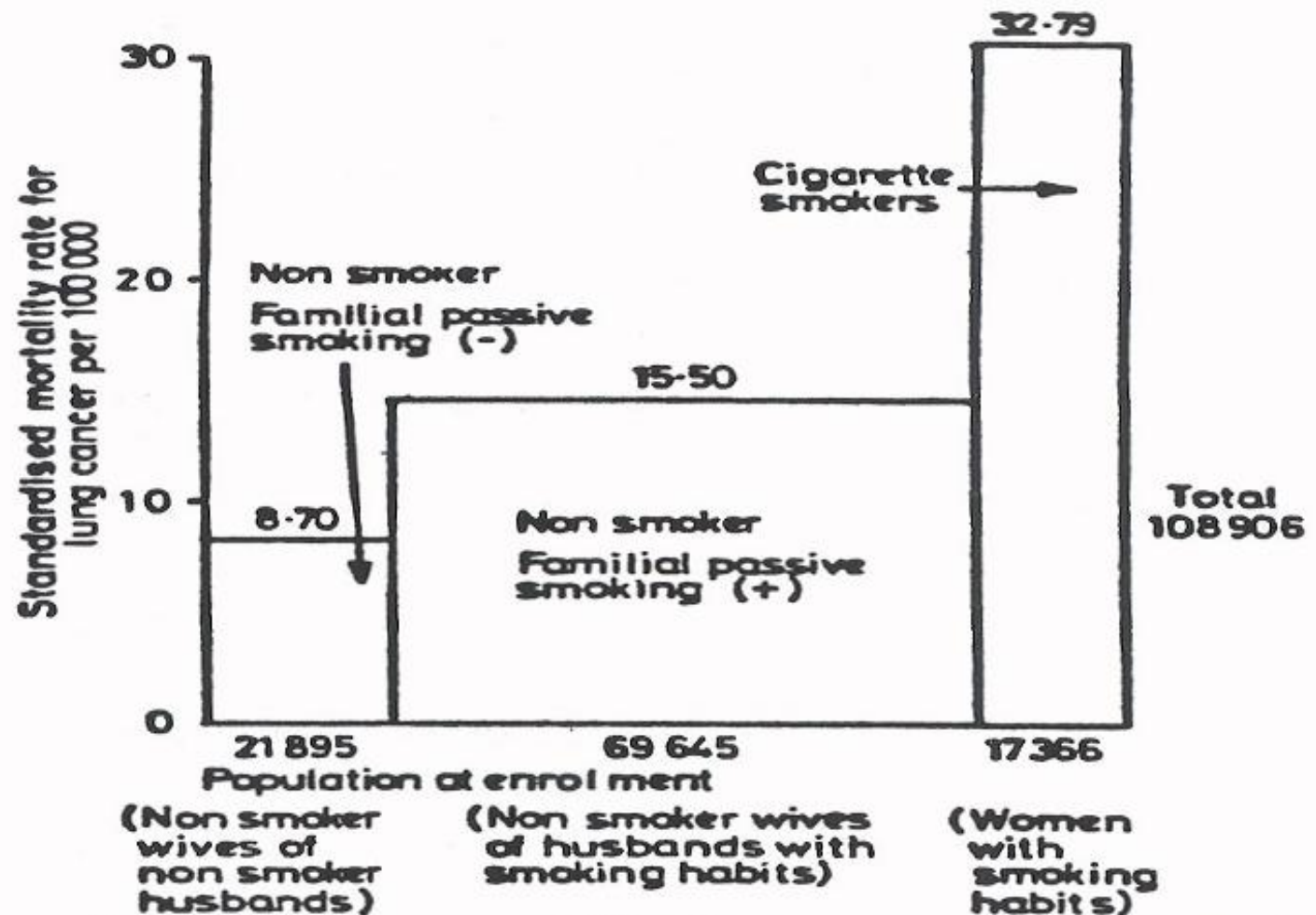


FIG 1—Lung cancer mortality in women according to the presence or absence of direct and familial indirect smoking.

T. Hirayama. BMJ .1981.



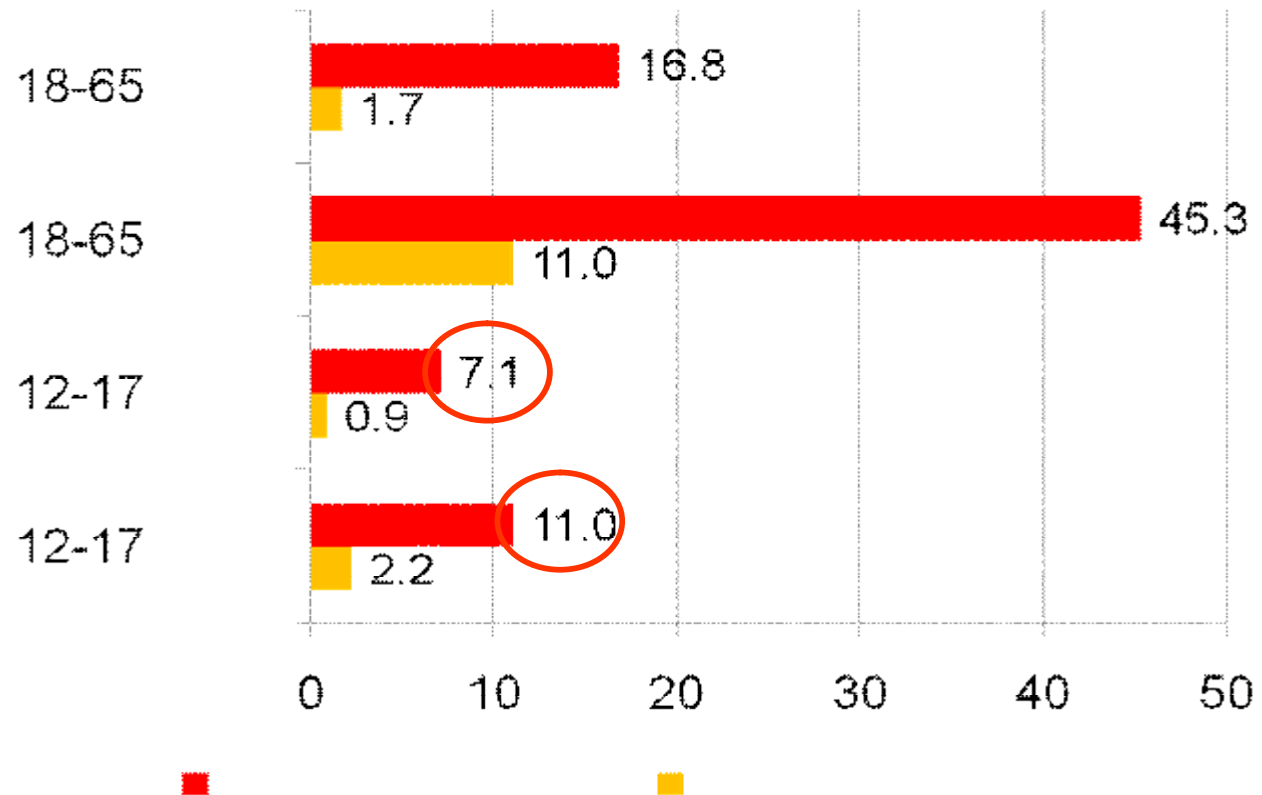
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Legal drugs: alcohol



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Alcohol consumption, 2008



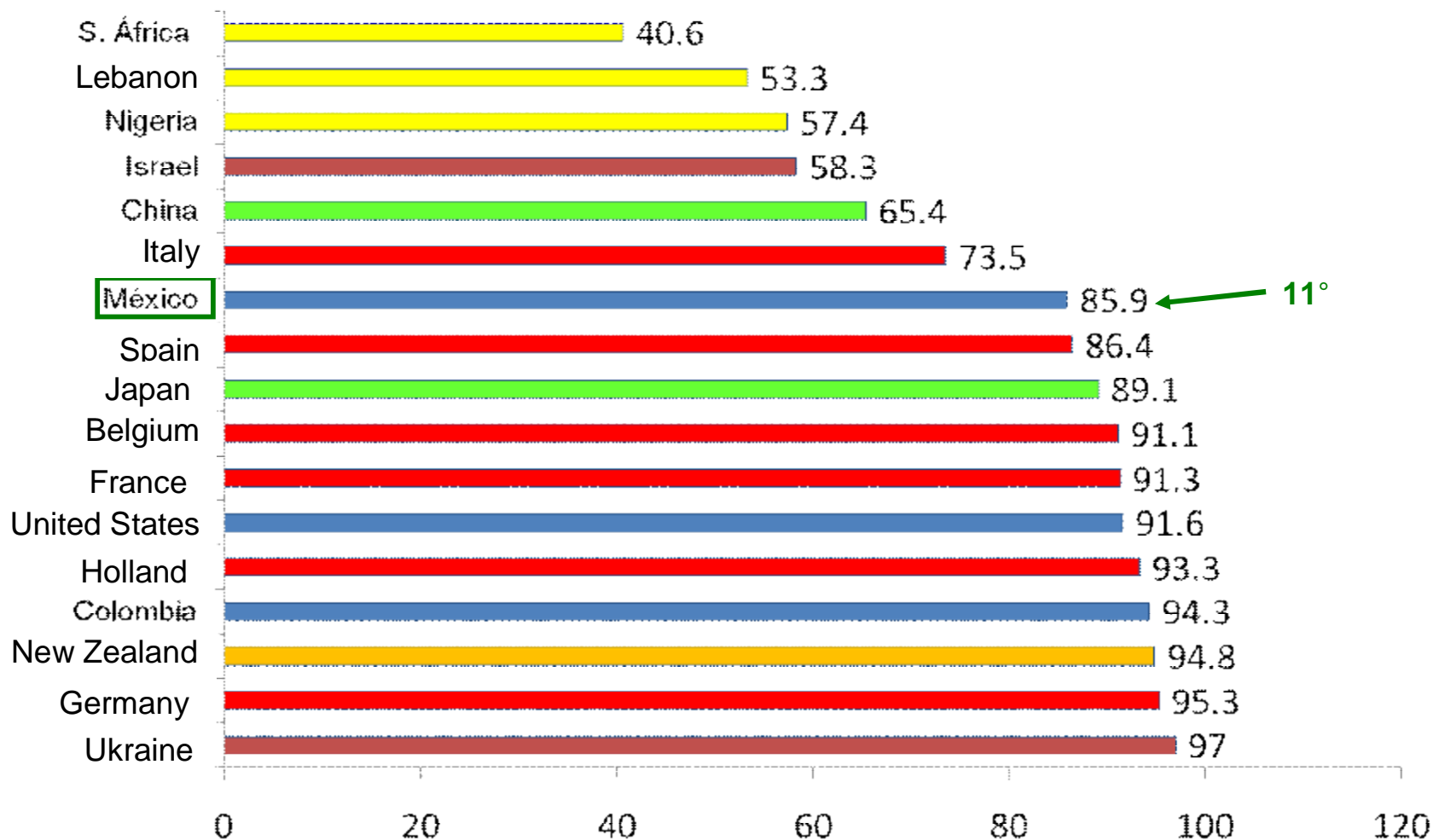
27 million of mexicans drink alcohol in great amounts

Adolescents are imitating the adult consumption patterns



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Cumulative incidence of alcohol use in 17 countries



* Accumulated incidence or life time prevalence is estimated since the identification of consumption history of individuals that had survived until the moment of the study.

México: Guilherme Borges, Carmen Lara, Corina Benjet, Clara Fleiz, Estela Rojas, Jerónimo Blanco, Jorge Villatoro, Leticia Casanova. Estudio Internacional: Ron Kessler, Berdirhan Üstün



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Epidemiological Addictions Surveillance System (SISVEA): cases by drug of initiation

Drug	Cases	%
Alcohol	2114	32.9
Tobacco	1484	23.1
Marijuana	1450	22.6
Inhalants	945	14.7
Cocaine and derivatives	278	4.3
Metamphetamines	95	1.5
Central nervous system depressors	24	0.4
Other drugs	19	0.3
Heroin	7	0.1
Hallucinogens	6	0.1
Other opiates	6	0.1
TOTAL	6428	100



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Epidemiological Surveillance System for the addictions (SISVEA): cases by impact drug

IMPACT DRUG	CASES	%
Marijuana	1442	22.4
Inhalants	1364	21.2
Alcohol	1326	20.6
Cocaine and derivatives	11.81	18.4
Metamphetamines	567	8.8
Tobacco	282	4.4
Heroin	91	1.4
Central nervous system depressor	89	1.4
Hallucinogens	41	0.6
Other Drugs	40	0.6
Other Opiate	5	0.1
TOTAL	6428	100



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Deaths by traffic accidents (1985-2001) in the Americas

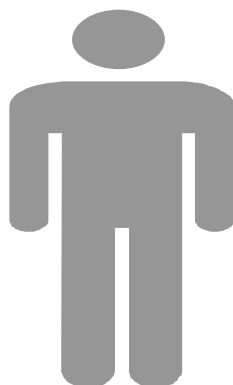
- 1.26 million people in the world died in the year 2000 because of road traffic injuries (RTI).
- 90% of them lived in countries of low or medium income.
- That year, the rate of mortality by RTI in the world was **20,8** deceased by 100,000 inhabitants.
- In the Americas, it was of **26,7** for men and **8,4** for women.
- From 1997 to 2000 the RTIs were the 10th cause of death among the general population.
- In young people is the second most frequent cause of lost years.



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Deaths by RTIs in men: Magnitude of the problem

In 2003 the main cause of death among men aged 5-14 years were the traffic accidents caused by motor vehicles – in general – and the second main cause of death in the groups aged 15-24 and of 25-44.



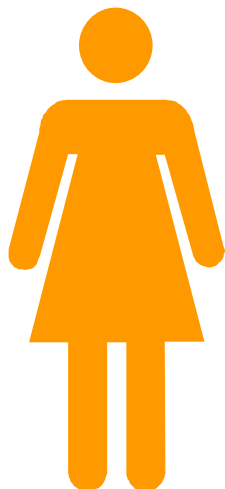
AGE	PERCENTAGE
5-14 yo	19%
15-24 yo	19%
25-44 yo	12%



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Deaths by RTIs in women: Magnitude of the problem

In women, the traffic accidents of motor vehicles were the main cause of death in the following proportions:



AGE	PERCENTAGE
5-14 yo	15%
15-24 yo	18%
25-44 yo	7%



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Deaths by RTIs: Magnitude of the problem in the Americas

- In 12 Latin American countries, between 1985 and 2001, of all the deaths registered by all the **external causes**, the road traffic accidents represented between 20 and 30% in Mexico, Brazil, Belize, Canada, Puerto Rico and the United States.
- Of the deaths registered between 1996 and 2001, caused by road traffic accidents, the pedestrians represented between 20 and a 30% in Mexico, Colombia, Cuba, Puerto Rico and Venezuela.
- Studies in Mexico indicate that in this accidents, the pedestrians are the most vulnerable victims, especially in urban areas like the ones in Mexico City (54%).
- The deaths of occupants of motor vehicles represented between 10 and 25% in Mexico, Brazil, Colombia and Venezuela.



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Deaths caused by traffic accidents in countries of the Americas, 1985-2001

Most Important Risk Factors for RTIs

1. **Driving under the influence of alcohol or drugs.**
2. Lack of use of the vehicles protection for their occupants (seatbelts, security chairs for children and helmets for motorcyclists).
3. High speed driving.
4. Deficient planning of the highways.
5. Construction of routes that do not take into account the interaction between the different users especially the pedestrians.
6. Unsafe vehicle designs.
7. Inadequate implementation of road safety measures.



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Traffic accidents in young people

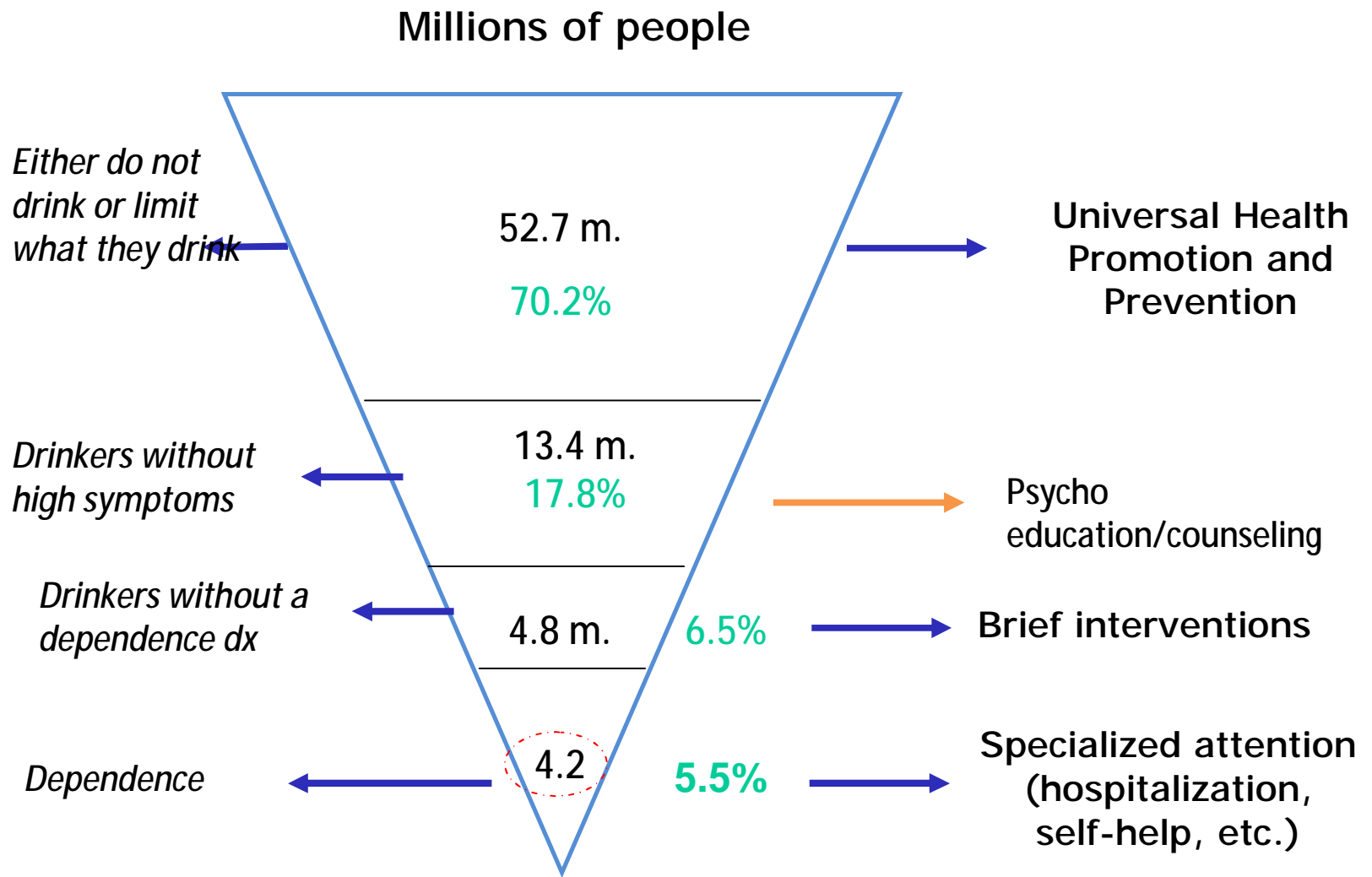
- The injuries and accidents represent 9% of mortality worldwide, with more than five million annual deceases.
- Every year two million adolescents in the world, suffer injuries by traffic accidents.
- The traffic accidents are the health problem that requires more days of hospital attention by patient (mean 5,2 days).
- 60% of injured people in traffic accidents, are men.
- The main causes of accidents are **the excess of speed and the excessive consumption of alcohol.**
- The consequences cost to our country 120 billions of pesos annually.

• según datos del Centro Nacional para la Prevención de Accidentes (Cenapra),



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Caring needs for alcohol problems in Mexico





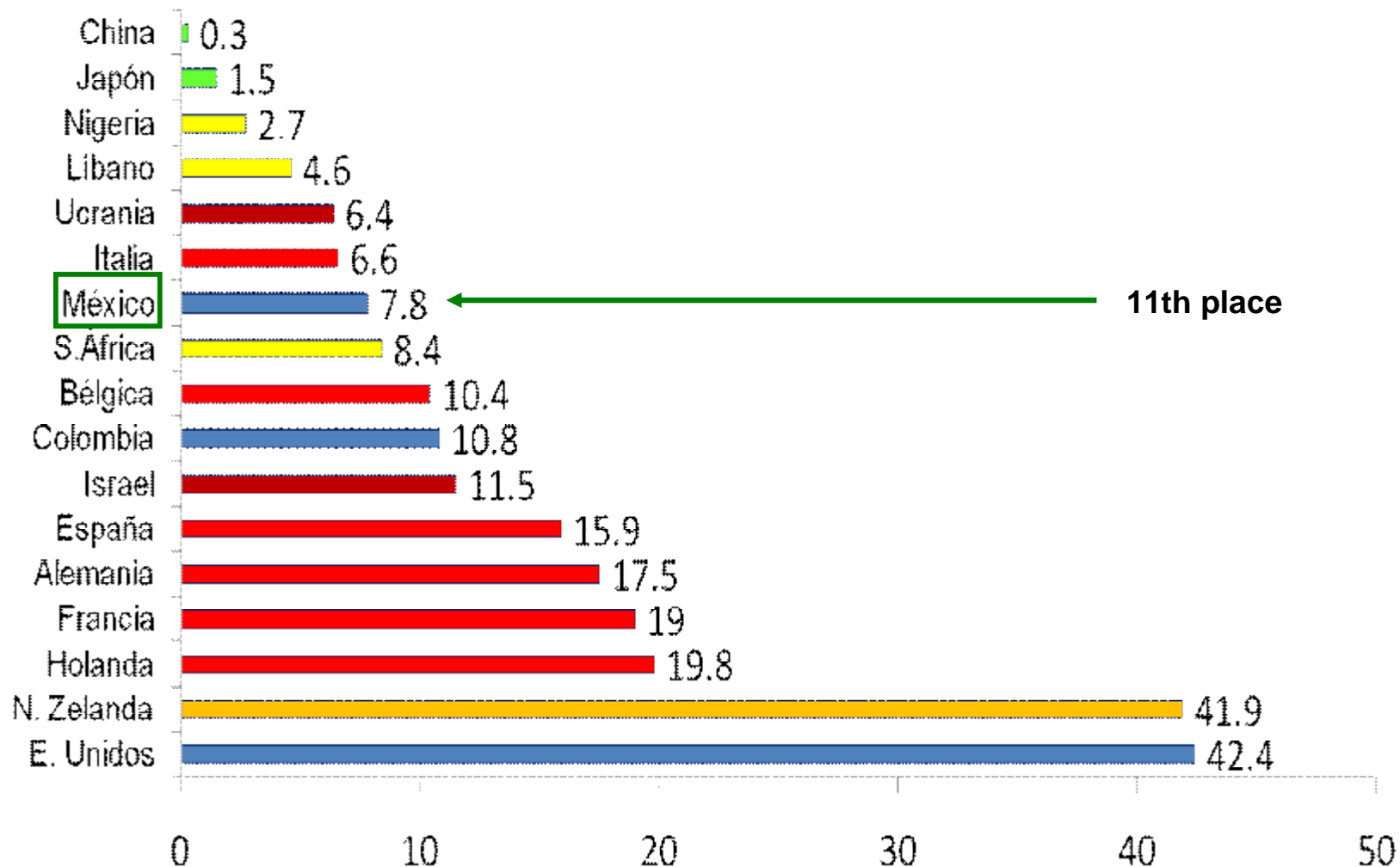
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Illegal drugs



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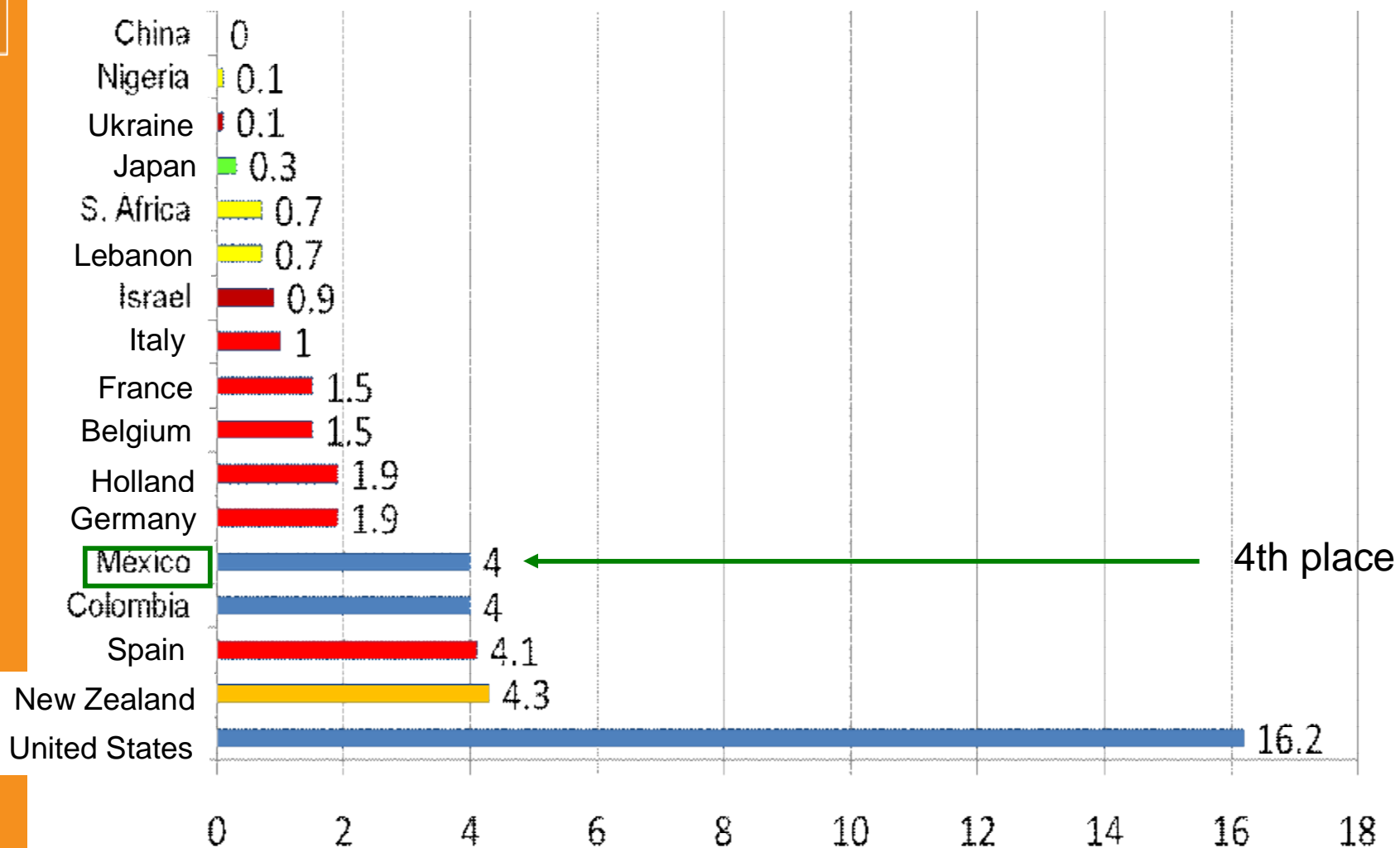
Cumulative incidence: Marihuana use





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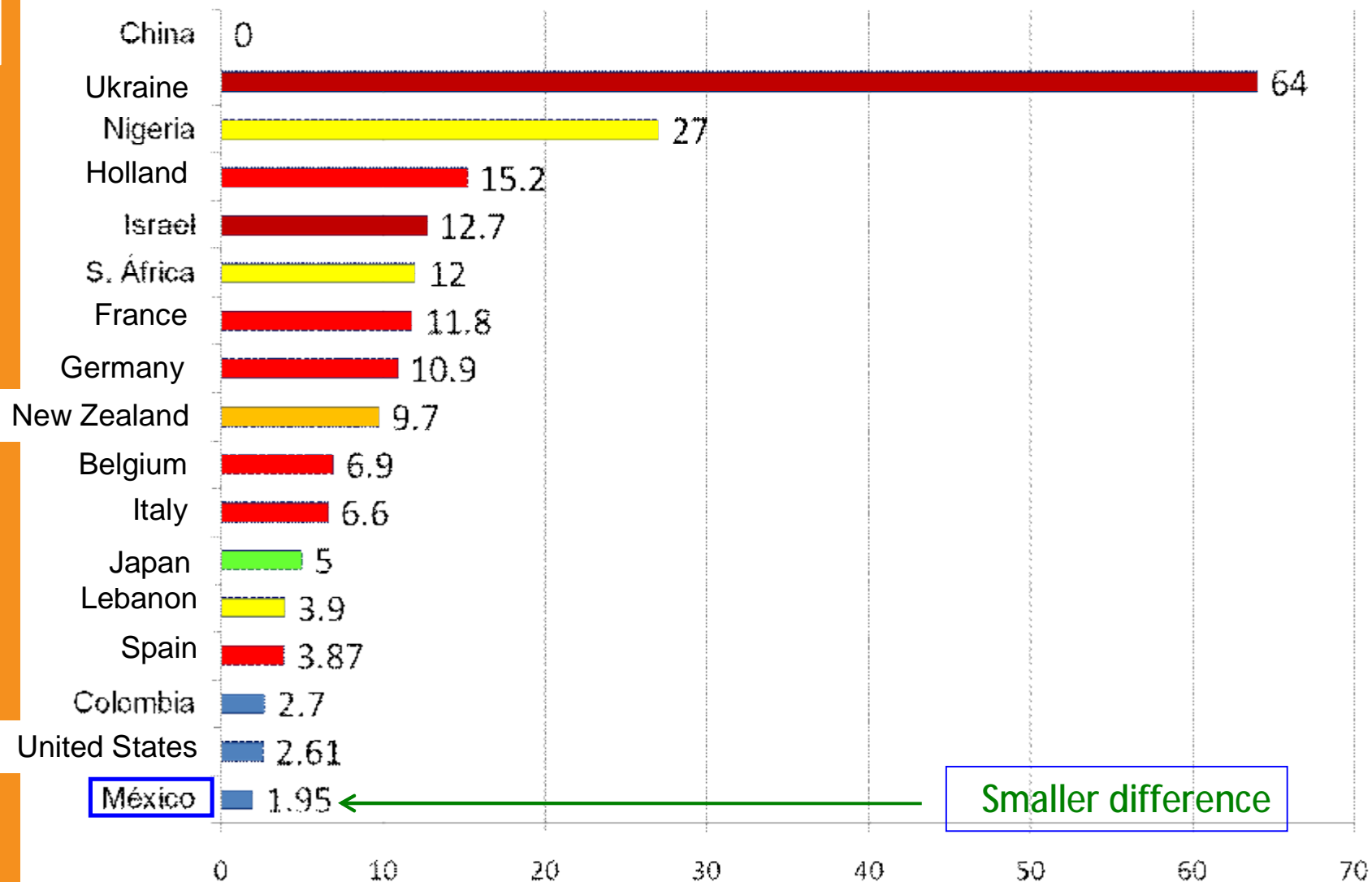
Cumulative incidence: Cocaine use





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Proportion of marijuana users by each cocaine user





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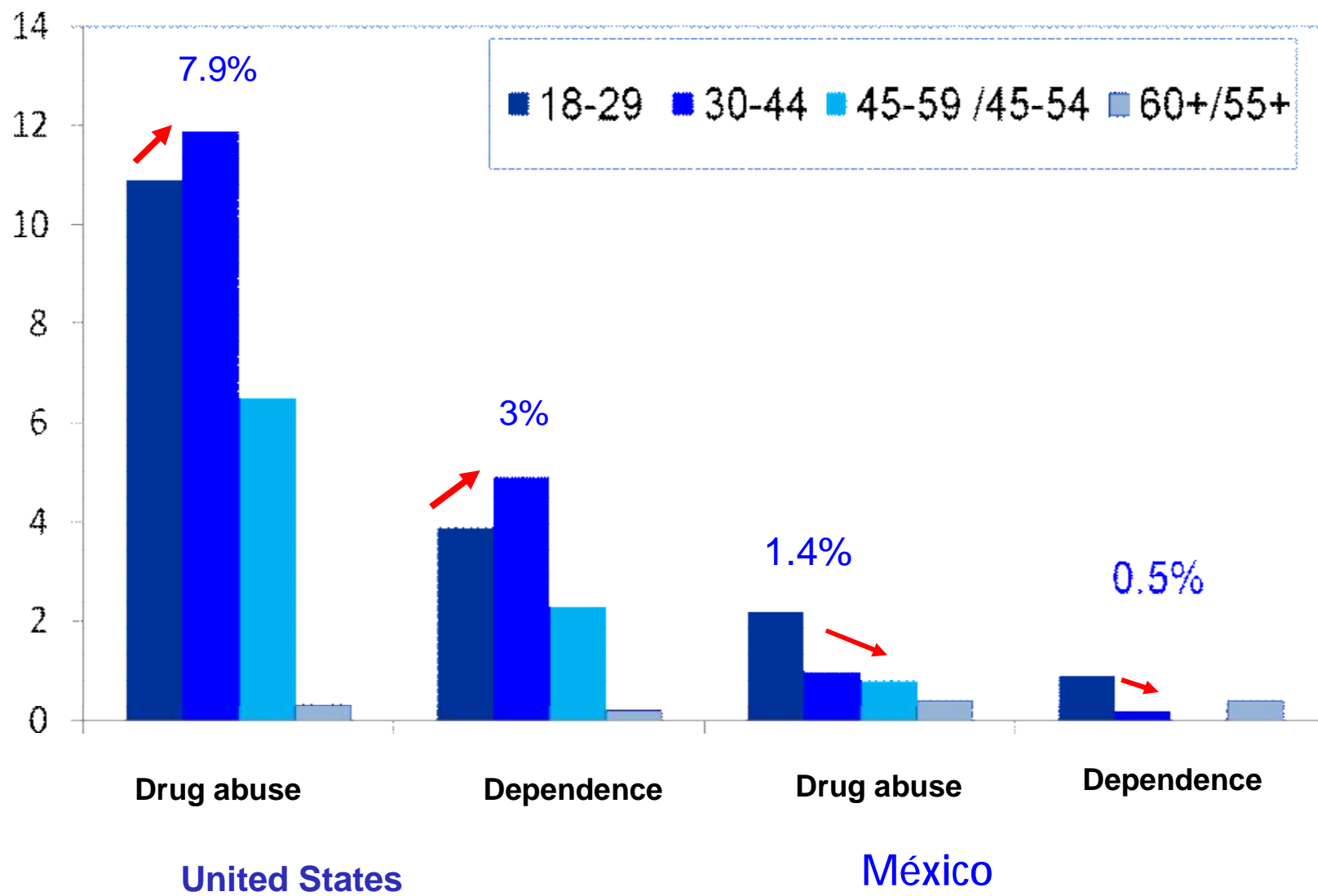
Main results

Drug	Place (among 17 countries)	Relative position of Mexico
Alcohol	11 (86% vs 97%)	Among the countries with GREATER level of consumption
Marijuana	11 (8% vs 42% -20%) NZ/EU H	In the LOWEST LEVEL By groups of countries it is located in the penultimate place
Cocaine	4 (4% vs 16% -4.3%) EU NZ	In the HIGHEST LEVEL By groups of countries it is located in the second place
Relation between marijuana / cocaine	1	Country with the SMALLER DIFFERENCE between the marijuana and cocaine use



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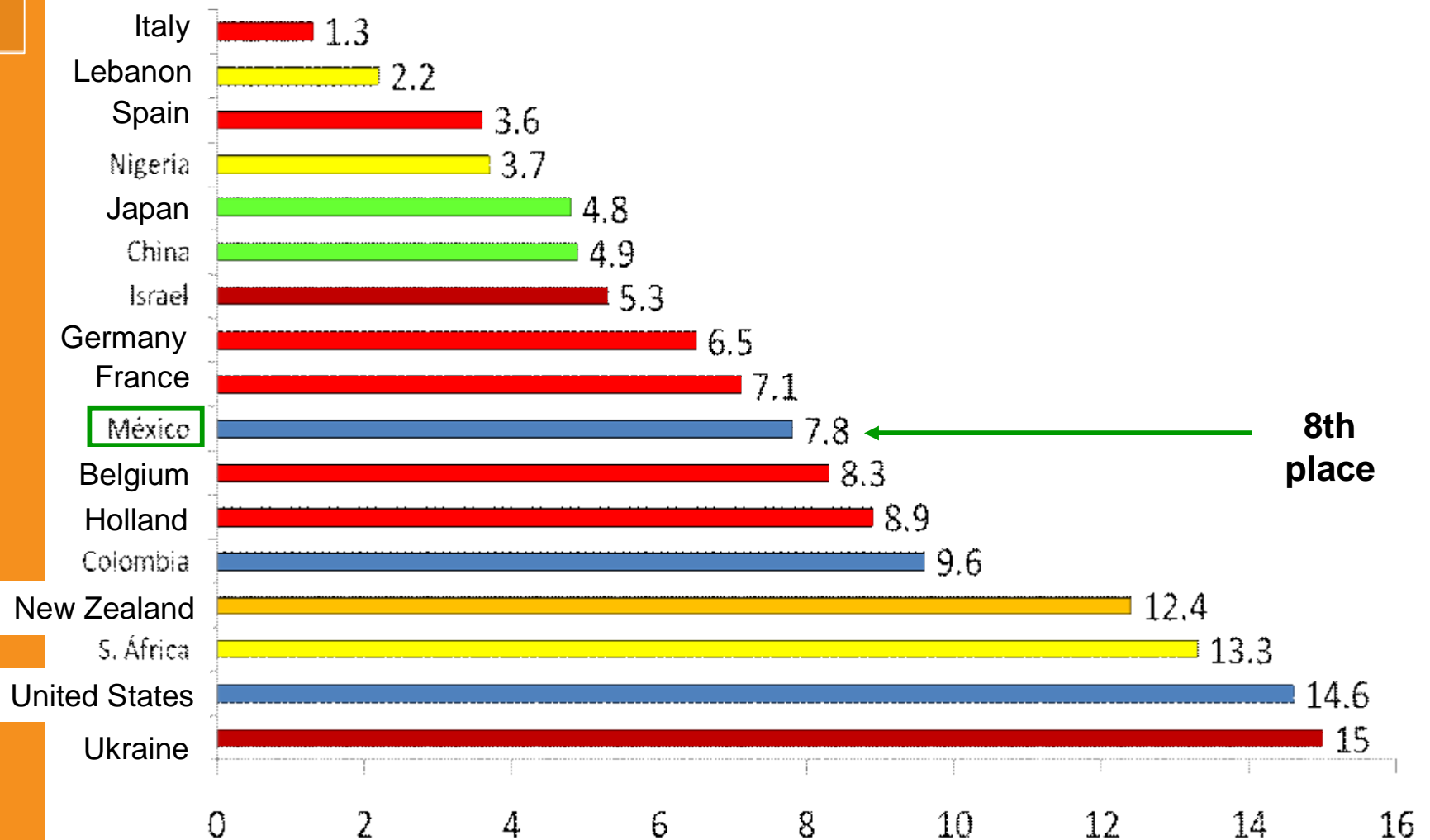
Cumulative incidence of drug abuse and dependence (DSM/ICD criteria) by age cohorts





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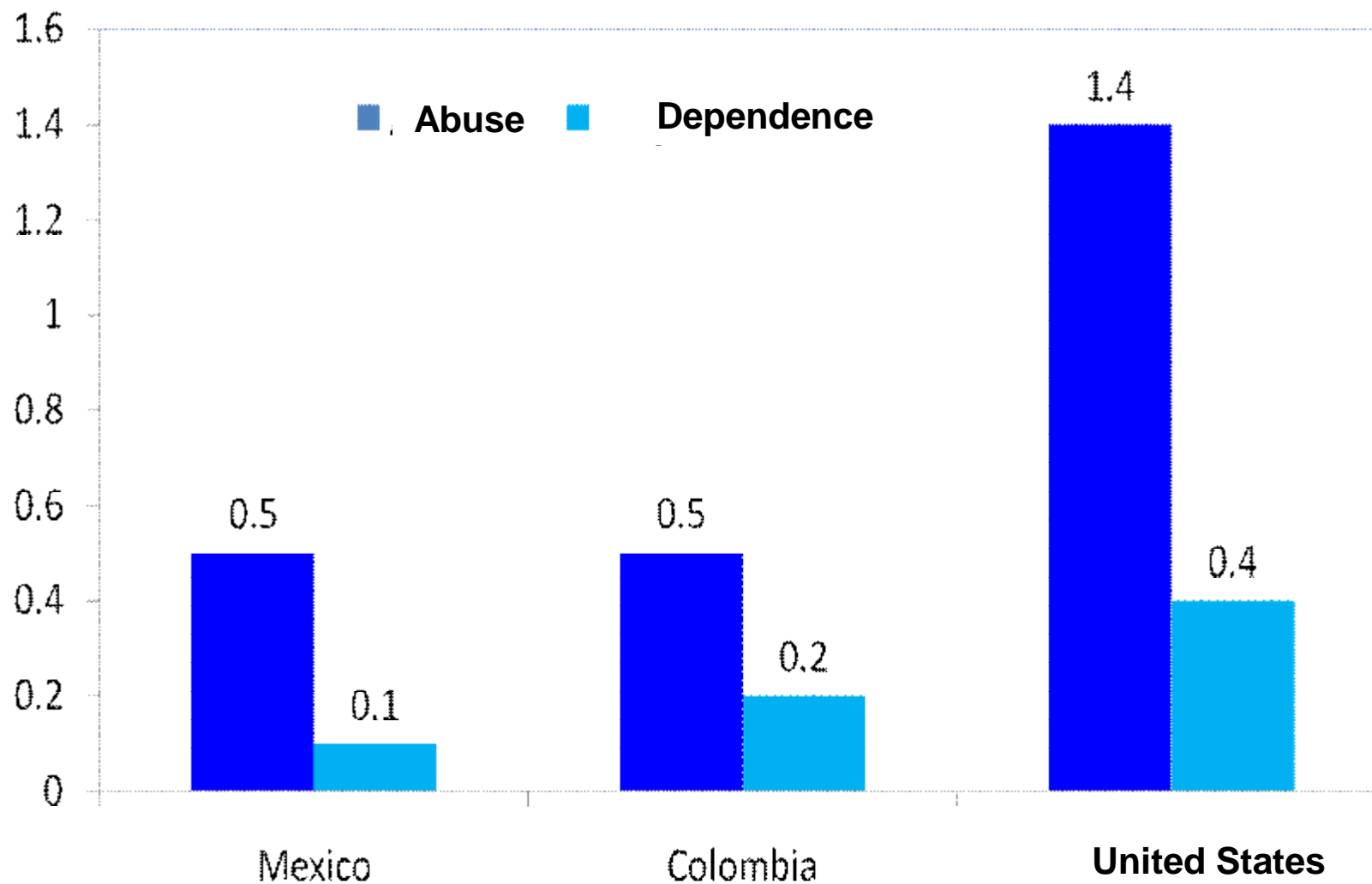
Life prevalence of substance use disorders





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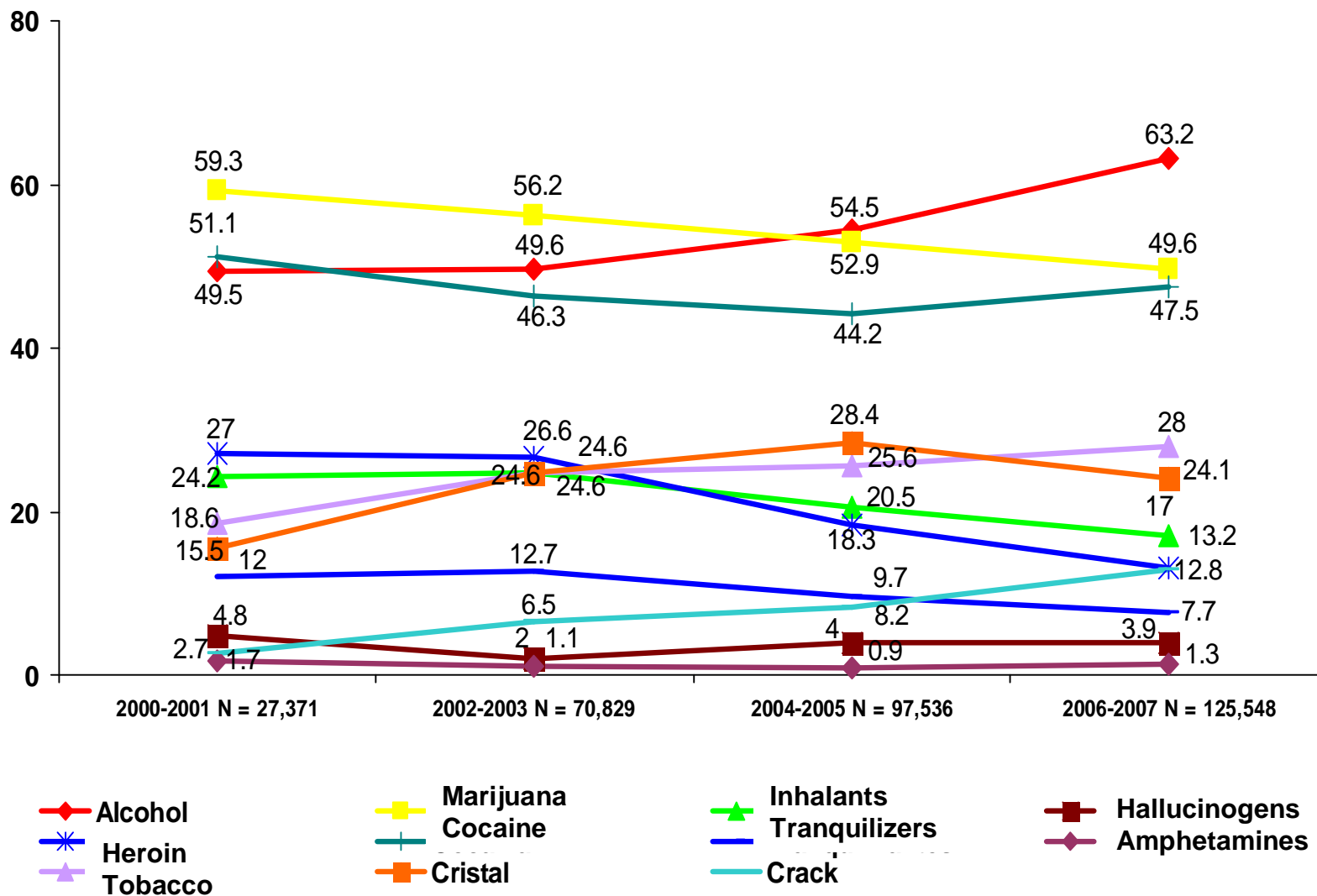
Annual prevalence of illicit drug abuse and dependence





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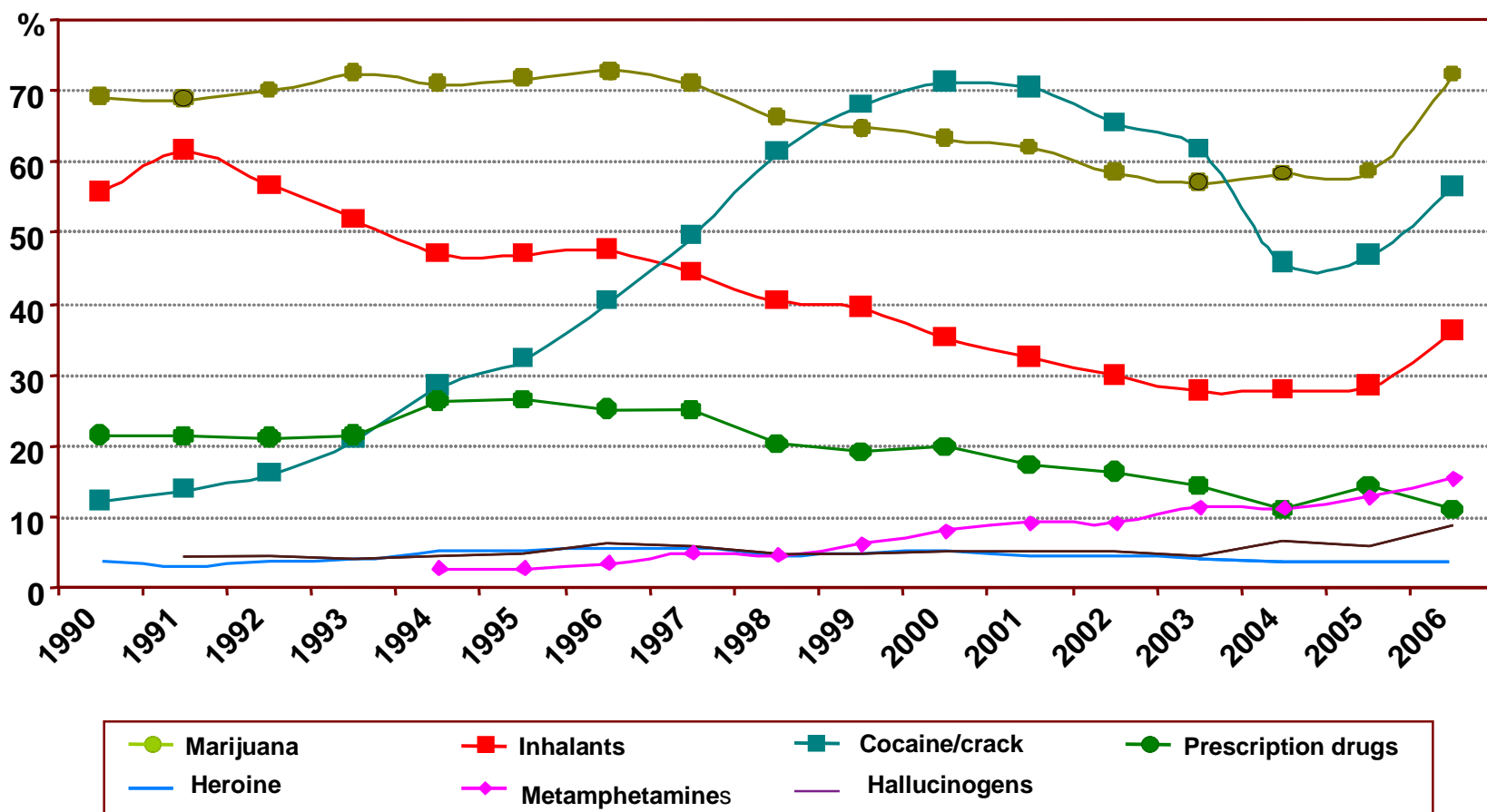
Trends: lifetime drug use. Population that attends treatment centers nationwide.





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Lifetime Illicit drug use in patients at first contact. CIJ 1990-2006.



Institutional epidemiological information system



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Trends in use: Cumulative incidence 1988-2008 Urban population, 12-65 years

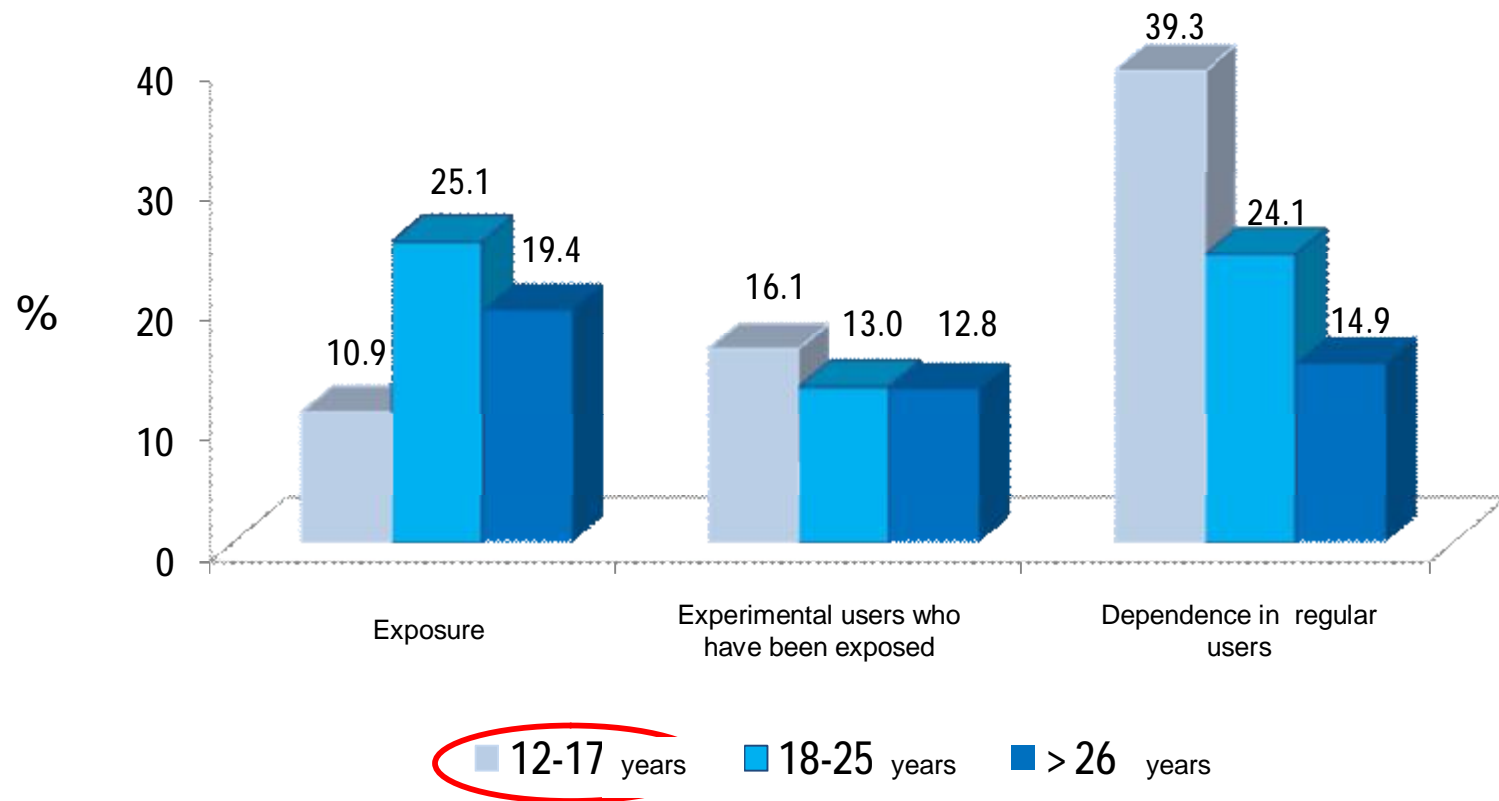
	1988	1993	1998	2002	2008	2008/1988
-Marijuana	2.99	3.32	4.70	3.87	4.80	1.6/1
-Inhalants	0.76	0.50	0.80	0.53	0.83	1.09/1
-Hallucinogens	0.26	0.22	0.36	0.29	0.45	1.73/1
-Cocaine	0.33	0.56	1.45	1.44	2.60	<u>7.87/1</u>
-Any drug	3.33	3.90	5.27	5.57	6.50	1.96/1

The greatest increase is observed in cocaine use:
For each user in 1988, there are 7.87 in 2008



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The greatest problem in our country: risk for progression as a function of age

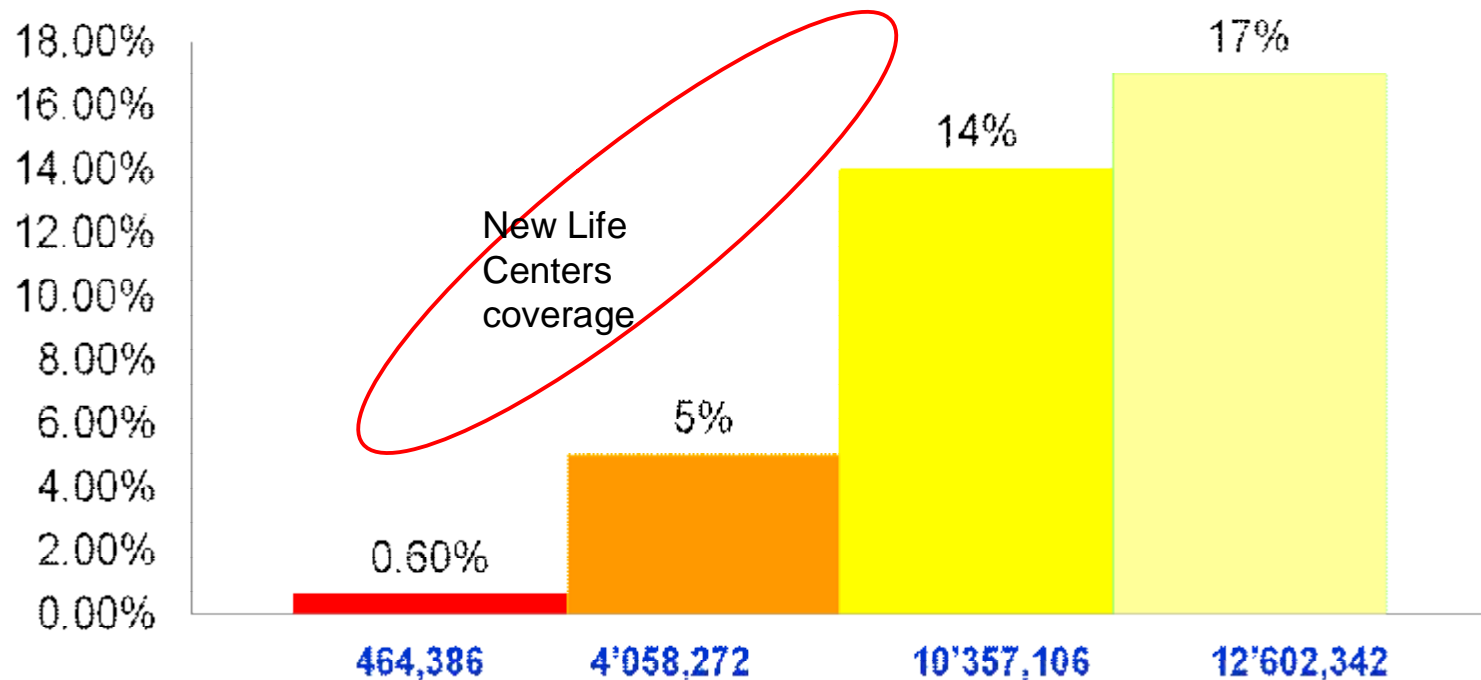


We know that the probability of progressing towards the use and dependence is greater when exposure occurs during the adolescence.



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Illicit drugs: Main intervention needs



■ Specialized treatment

■ Brief interventions

■ Selective and indicated interventions

■ Universal prevention

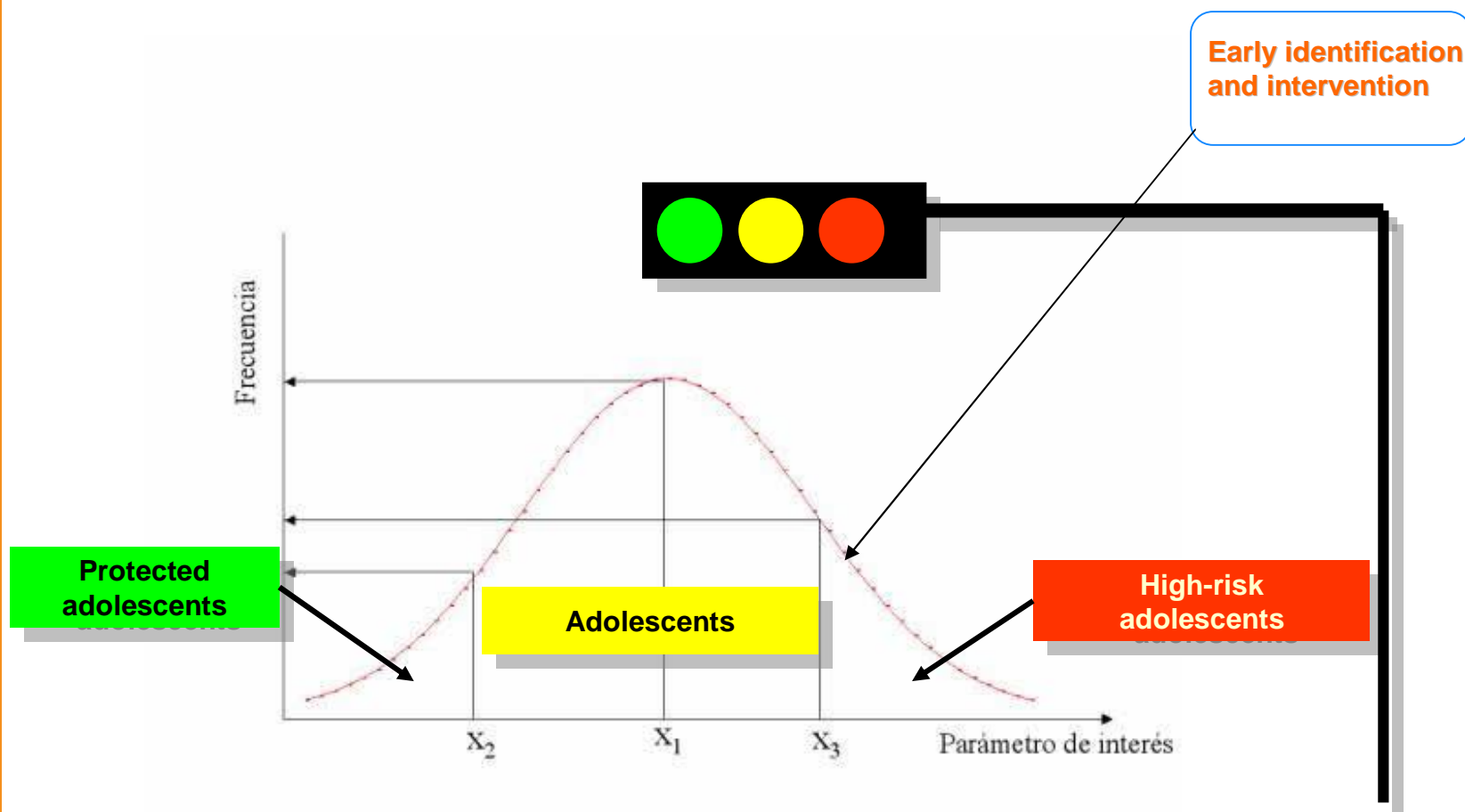
80% requires prevention

63% has been exposed to alcohol and tobacco use



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Evidence that supports the current model of care



Interventions are designed and implemented according to the target population



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Each New Life Center builds its network

Mental health, etc.

AA and other self-help groups for mutual assistance



334 New Life Centers



400 Residential units

110 Youth Integration Centers

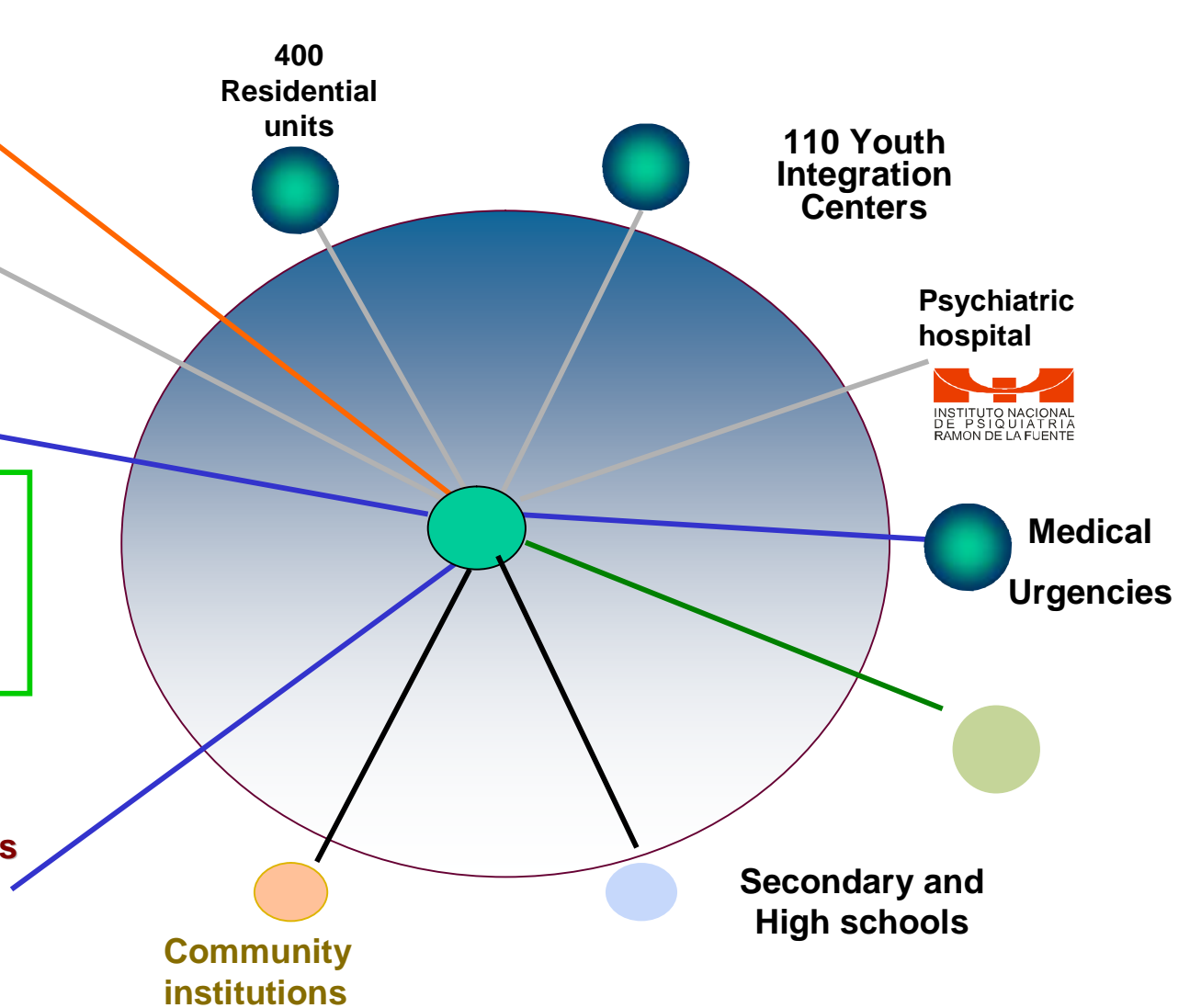
Psychiatric hospital



Medical Urgencies

Secondary and High schools

Community institutions





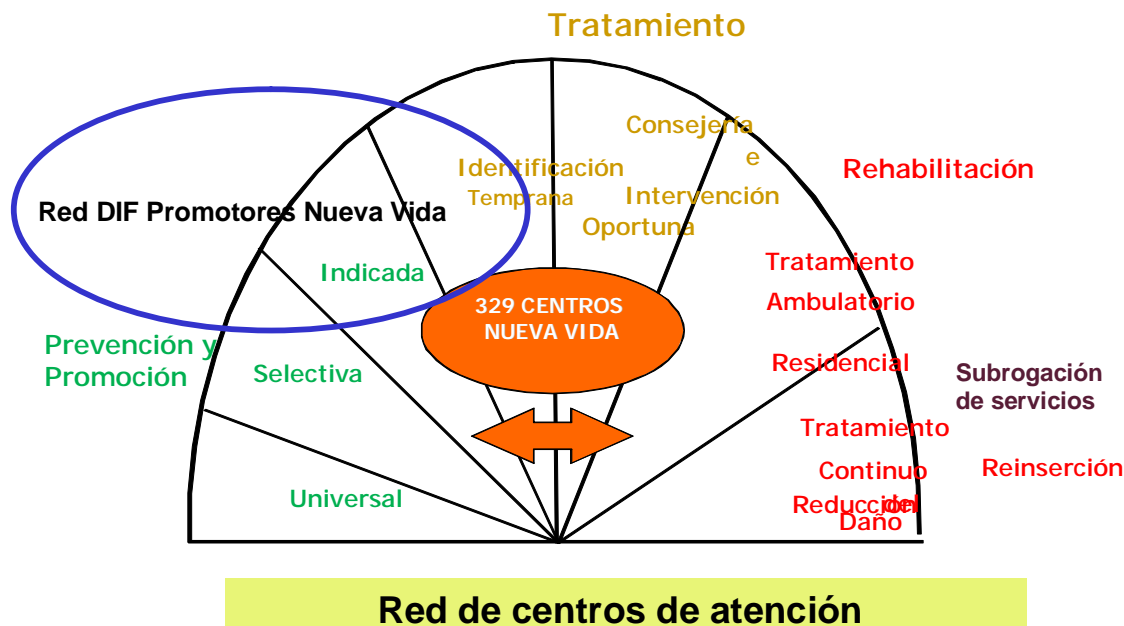
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Universal, selective and indicated prevention in Mexico

The Federal Government is implementing the present model of care:

1.-Through 334 Prevention Centers and the Services Network (comprising a total of 2,000 centers); and through 7,000 promoters (*"New Life"* informative campaign), in order to screen individuals at risk (screening in schools) and offer them an early intervention.

2.-Effective referral to the addiction treatment network and subsidy program.



3.- Prevention in school-age population (*"Safe school program"*) and in recovered urban spaces

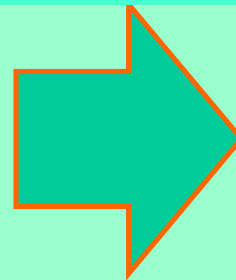
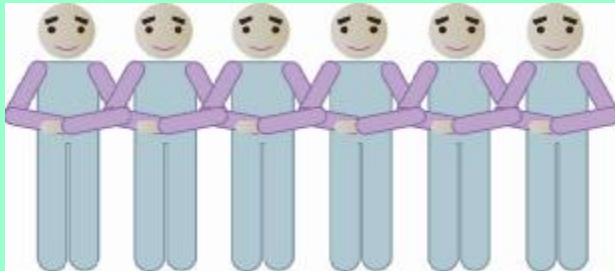


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"New Life" Promoters Network

- To construct a National Network of Promoters of First Contact that supports the tasks of early detection and opportune derivation to specialized centers serving as meeting point

"New Life" Promoters National Network



"New Life" Centers



- § To promote the best attention and treatment in order to avoid progression of SUDs severity



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**GOBIERNO
FEDERAL**

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Centro Nueva Vida
Atención Primaria para
las Adicciones



New Life Centers





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Working in networks





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Thanks!