## Models of Prevention From Concept to Public Policy

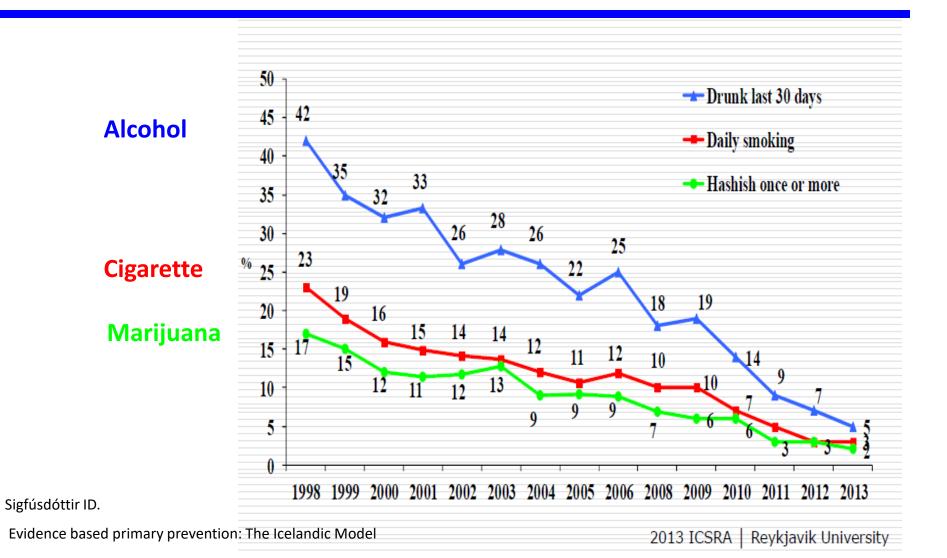
#### The Icelandic Model

H.E. Soriano, M.D.

M.J. Mann, Ph.D.

H.M. Morehouse, Ph.D.

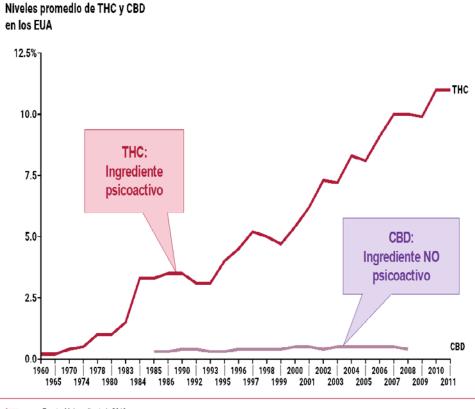
#### The Icelandic Model



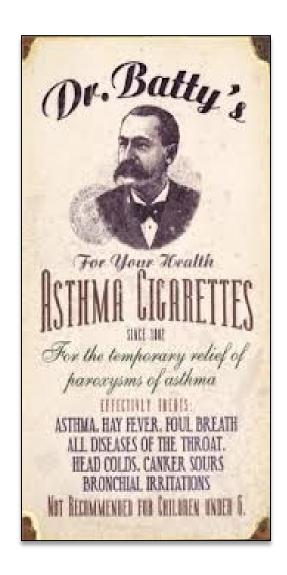


### Marijuana: Today a different drug!

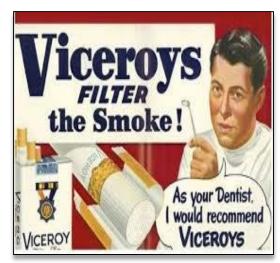
- 7 X more potent.
- 1 in 6 become addicts.
- Not medicinal



### 'Big Tobacco' Advertising in the 50's

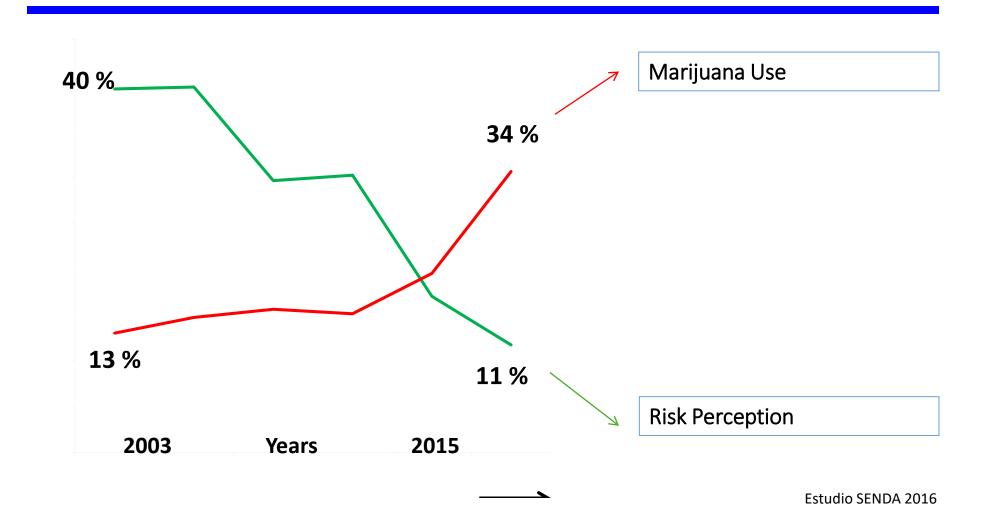








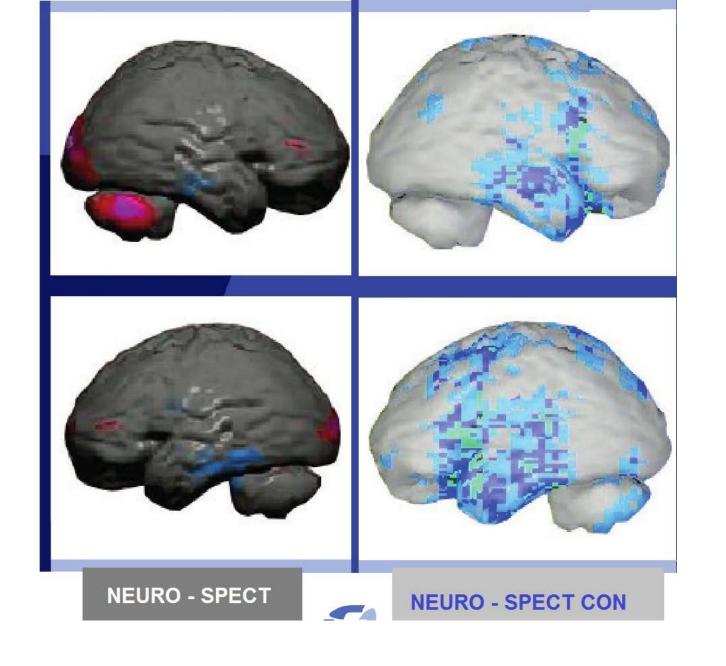
#### Marijuana: Risk perception vs. Consumption



# Alcohol & Drugs: Hurt Children!

Children's Brain is more vulnerable:

- Neuron pruning
- Axons not covered by myelin



#### Marijuana: Hurts children's health

#### Regular use:

- Learning disabilities
- Lowers school performance
- Increases dropout rate

Silins E et al., **The Lancet Psychiatry 2014**; 1(4): 286-293.

#### **Consistent use:**

- Lowers IQ 8 points
- Irreversible if started under age 18

# Marijuana: Drives them mad...

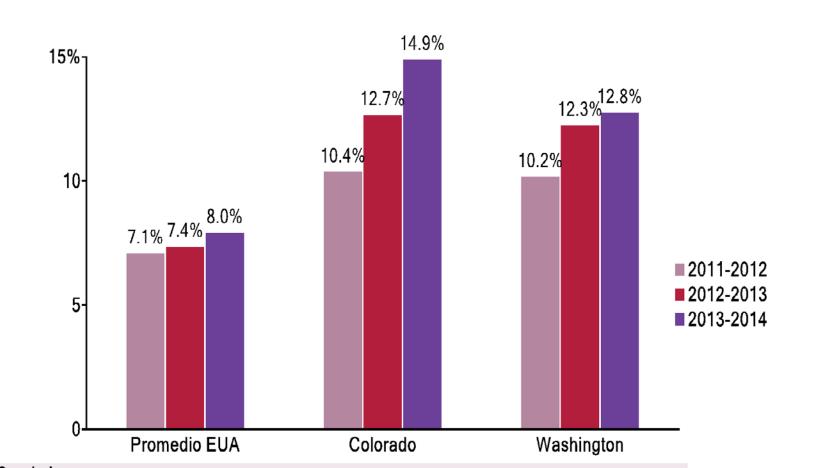
 Increases risk of psychosis, schizophrenia and other mental illnesses.

Volkow N et al., **N Engl J Med 2014**; 370: 2219-27; The health y and social effects of nonmedical cannabis use. **WHO**, 2016.

Lowers achievements.

Chronic bronchitis.

## Marijuana: Legalization Increases consumption



## Models of Prevention From Concept to Public Policy

How the Model Works

Dr. Michael Mann, Ph.D.





#### Icelandic Model Assumption 1:

Adolescent substance use is not randomly distributed throughout the population...

Adolescent behavior a reflection of their social environment.

### Sample profile – social risks

#### Youth 1

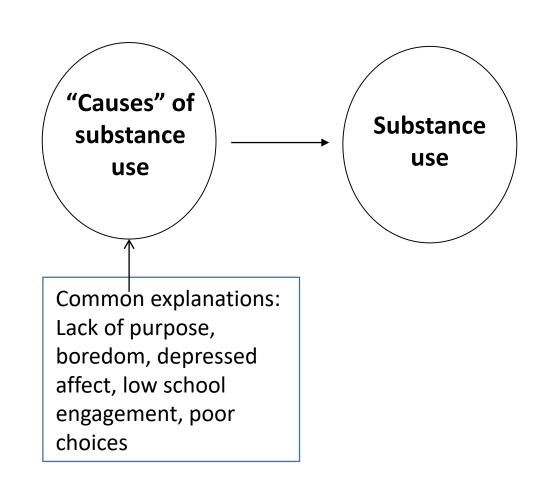
- Lives in a deprived area with relatively high crime rates
- Parents separated, mother works two minimum wage jobs
- Attends a chronically under-performing and underfunded public school
- Peers commonly subject to substance abuse at home
- Has limited opportunities for participation in organized recreational and extracurricular activities at school and in the community

#### • Youth 2

- Lives in a middle-class area with low crime rates
- Parents cohabitating, both full time working professionals
- Attends an average performing and average funded public school
- Peers unlikely to be subject to substance abuse at home
- Has opportunities for participation in a variety of organized recreational and extracurricular activities in the school and community

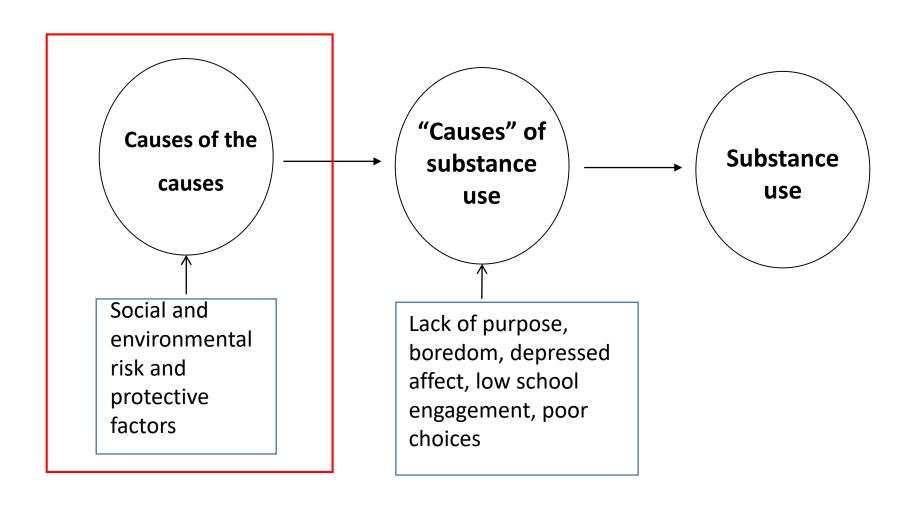
## Viewpoint 1. <u>Individual responsibility</u>:

the causes of substance use



#### Viewpoint 2: Community responsibility.

the "causes of the causes" of substance use



#### Icelandic Model Assumption 2:

Individual behavior change is <u>notoriously</u> difficult to accomplish

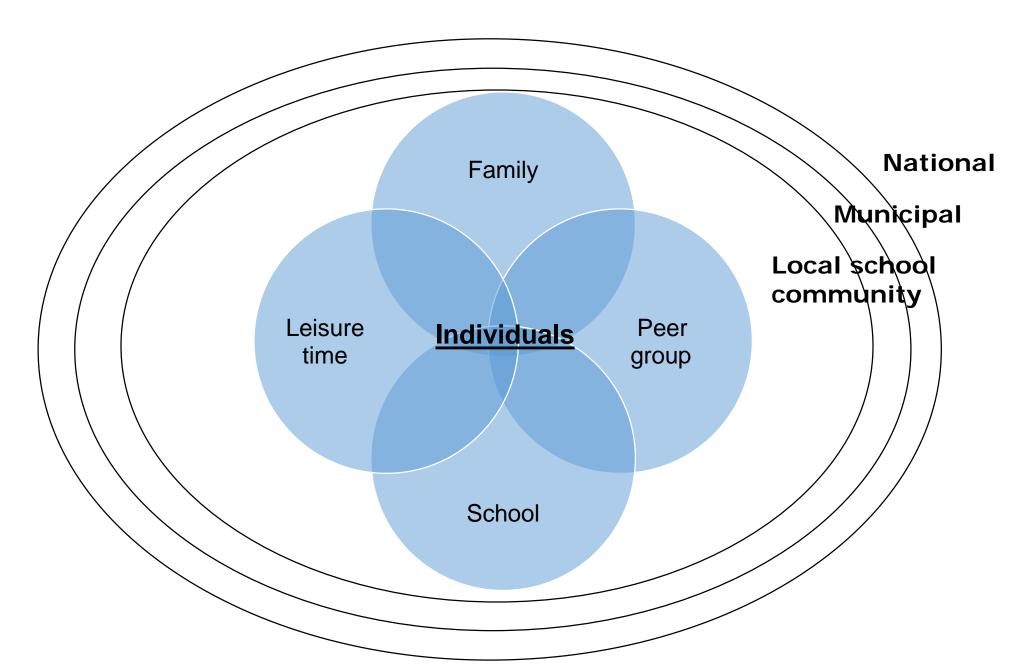
#### Icelandic Model Assumption 3:

Substance use prevention:

There are no quick fixes or simple solutions...

aka. The scope of the solution must match the scope of the problem.

Icelandic Model: Ecological domains of intervention focus

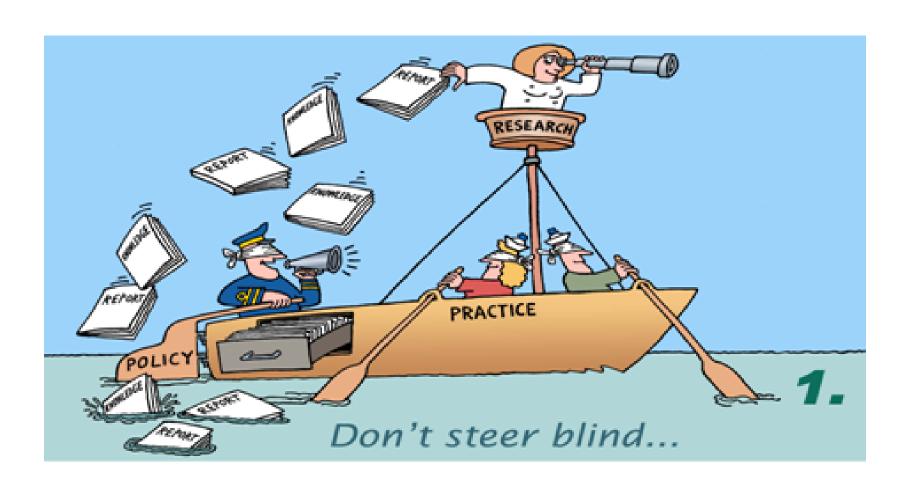


## Overview: Core Steps

- 1. Community Capacity Building
- 2. Data Collection, Diagnostics, and Dissemination
- 3. Structured Community Response
- 4. Repetition

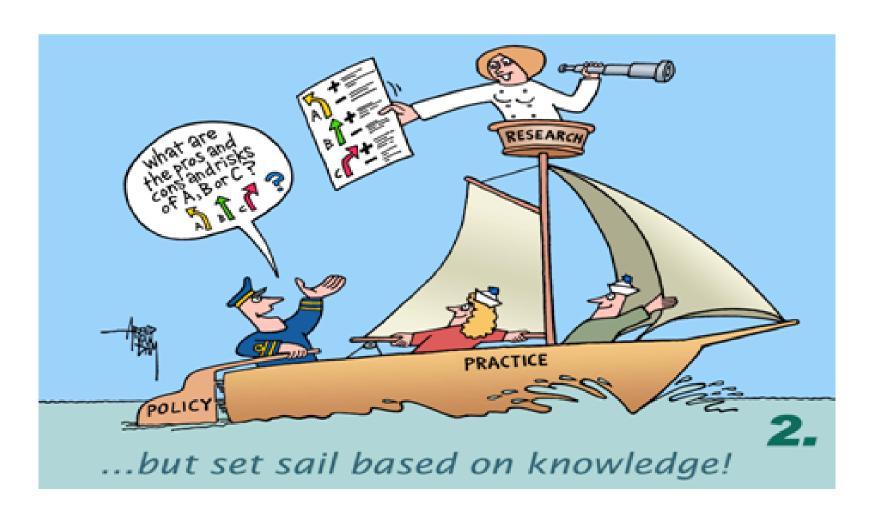
#### Aims: What unfortunately often tends to happen:

Research — Policy — Practice

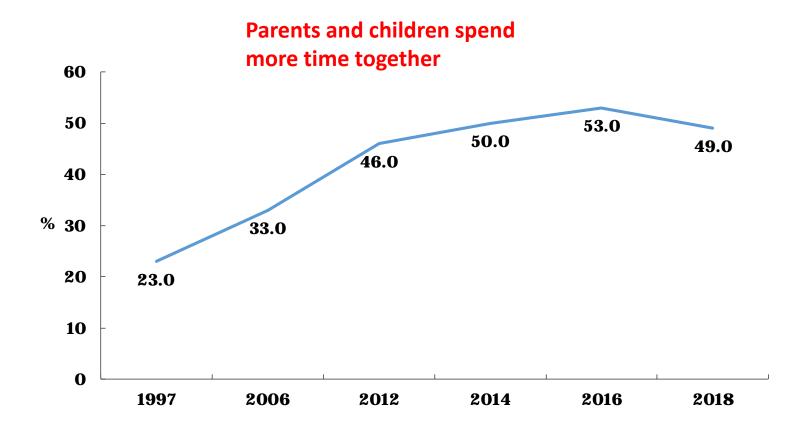


#### Aims: What we would like to see happen:

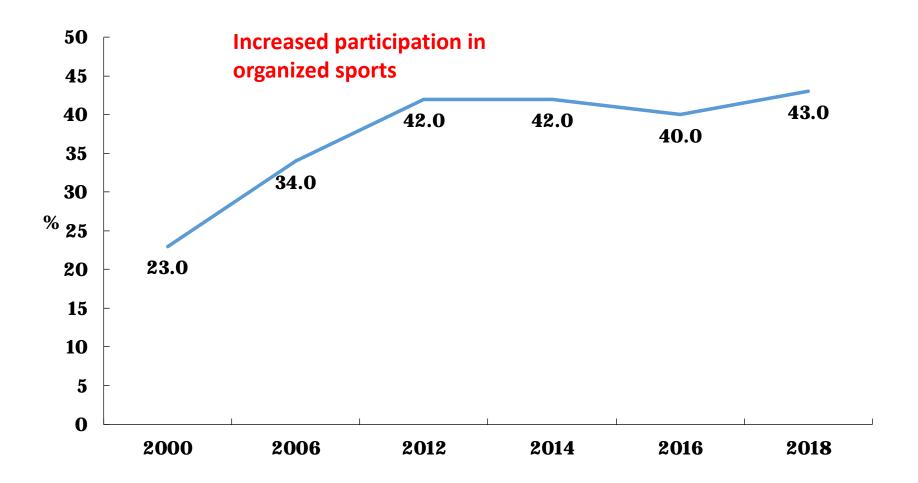
Research — Policy — Practice



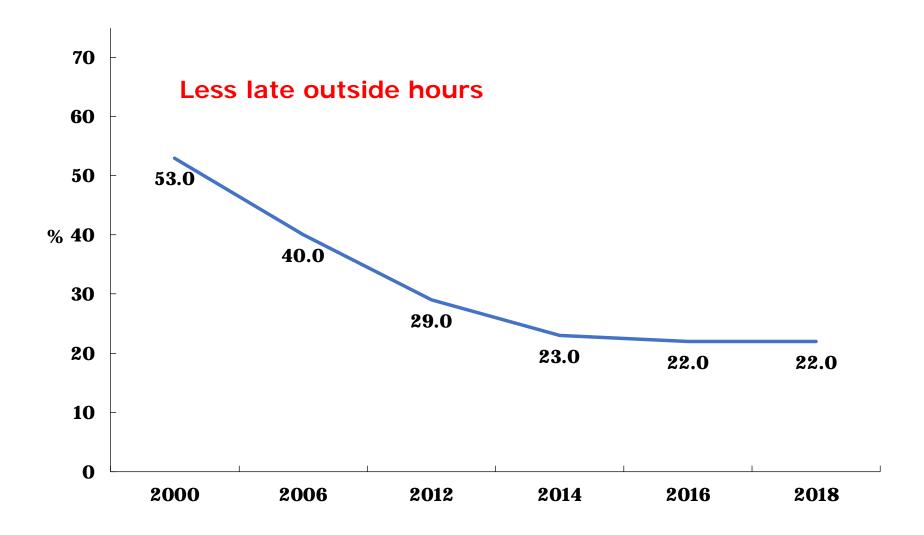
....repeatedly and consistently over time



Rates of students in 9<sup>th</sup> and 10<sup>th</sup> grade who spend time (often/almost always) with their parents during weekdays

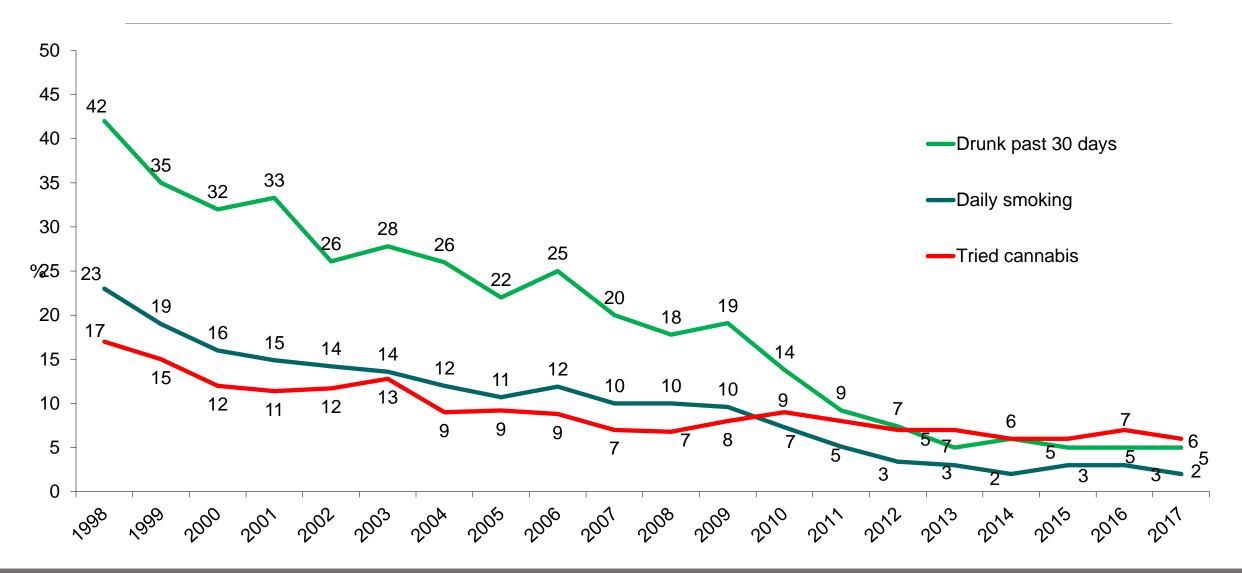


Rates of students in 9<sup>th</sup> and 10<sup>th</sup> grade that participate in sports with a team or club four times per week or more often



Rates of students in 9<sup>th</sup> and 10<sup>th</sup> grade who have been outside after 10 pm, 3 times+ in the past week

#### Iceland: Positive development over 20 years (10th grade students)





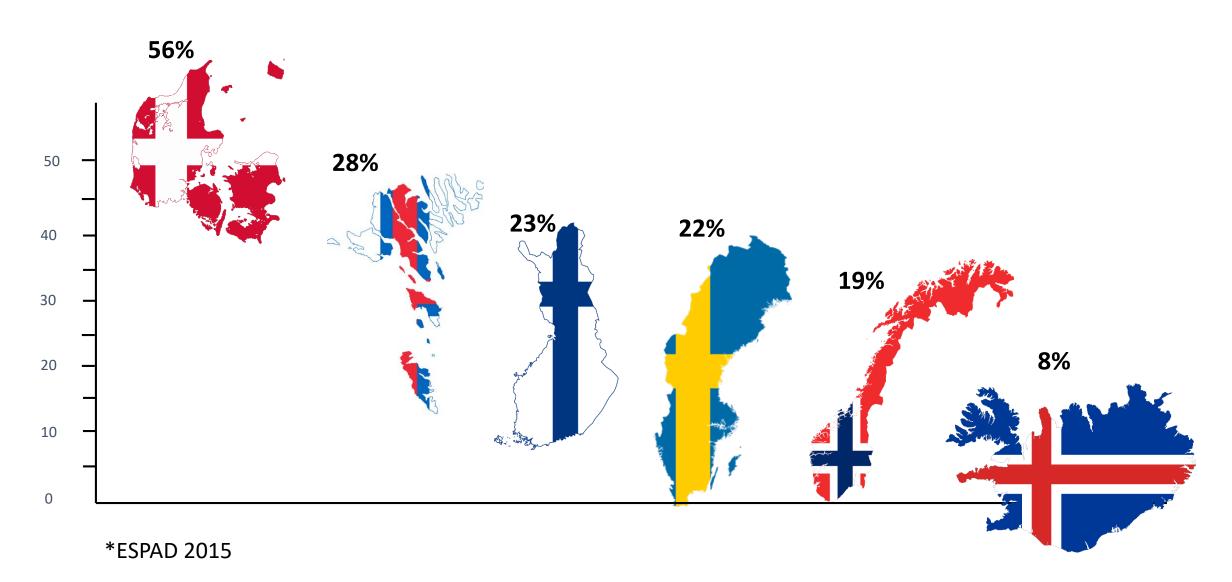
## Models of Prevention From Concept to Public Policy

## The Chilean Story

## Why Iceland?

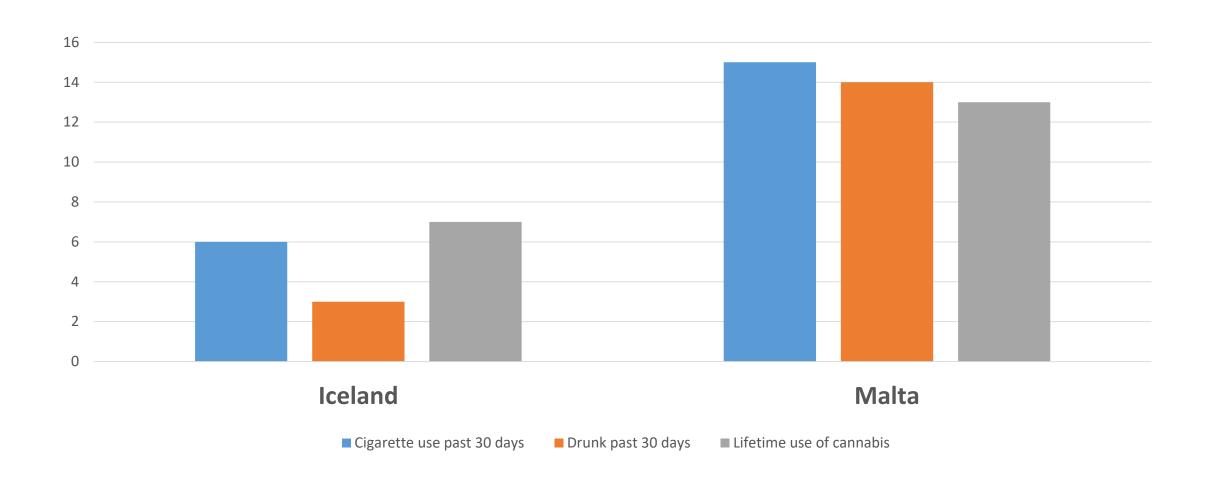
- Children's biology is the same
- Other nordic countries do worse
- Other small islands do worse
- It focuses on the here and now
- Custom made suit
- Only evidence based method that works

### Heavy episodic drinking in the last 30 days\*



#### Substance Use Amongst European Youth

(ESPAD, 2015)



#### SEMINAR 2017





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ORGANIZAN







#### **ENCUENTROS** EL MERCURIO



Cuando los índices de consumo adolescente de drogas y alcohol han batido todos los récords en Chile, los gestores del programa islandés -que logró bajar las cifras en forma considerable- ahondarán sobre el programa "Juventud en Europa" y sus posibilidades de implementación.

Ólafur Ragnar Grímsson: Ex presidente de Islandia por cinco

Inga Dóra Sigfúsdóttir: Jón Sigfússon:
Doctora en Sociología, cofundadora Experto en Salud Pública y cofundador periodos, hasta 2016. del Centro de Investigación y Análisis del Centro de Investigación y Análisis Social de Islandia.

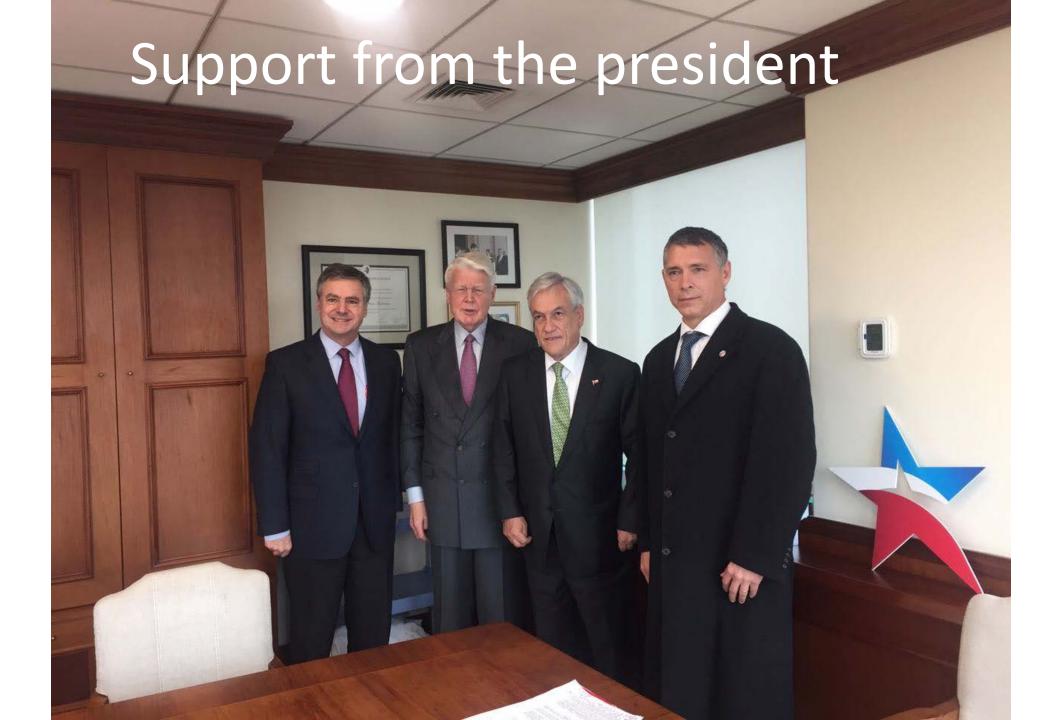
Social de Islandia.

Modera: Daniel Johnson, director ejecutivo Fundación Paz Ciudadana.

Valores: Socios Club de Lectores \$5.000 / Público general \$7.000 Venta de entradas: +56 2 2753 6363 y en Casas Club Alto Las Condes, Bandera 331 y Santa María

Compra online y más información en www.encuentroselmercurio.cl





# Scientific societies participate on signing with municipalities for pilot study last year



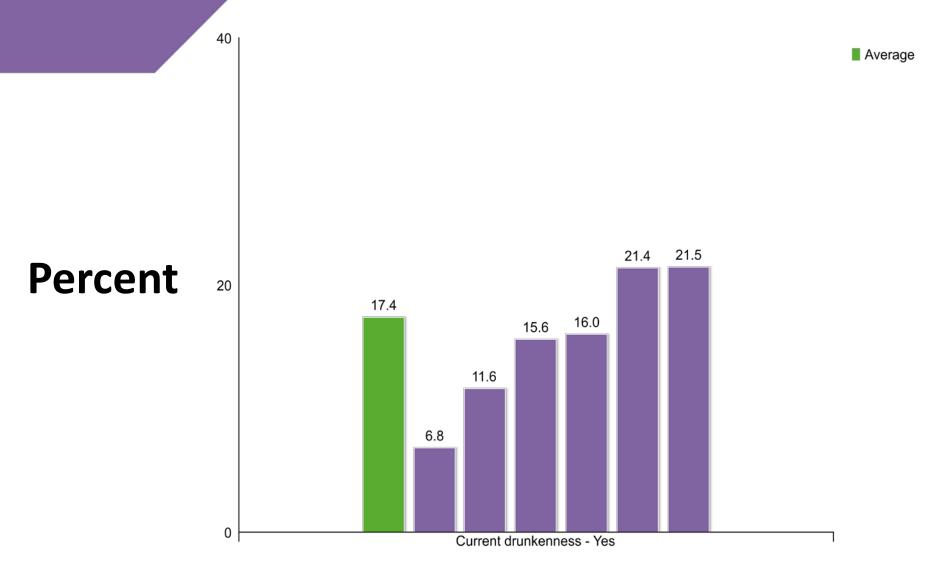
# Municipalities Pilot 2018:

- Colina
- Las Condes
- Lo Barnechea
- Melipilla
- Peñalolén
- Renca

# **Chilean Model of Prevention**

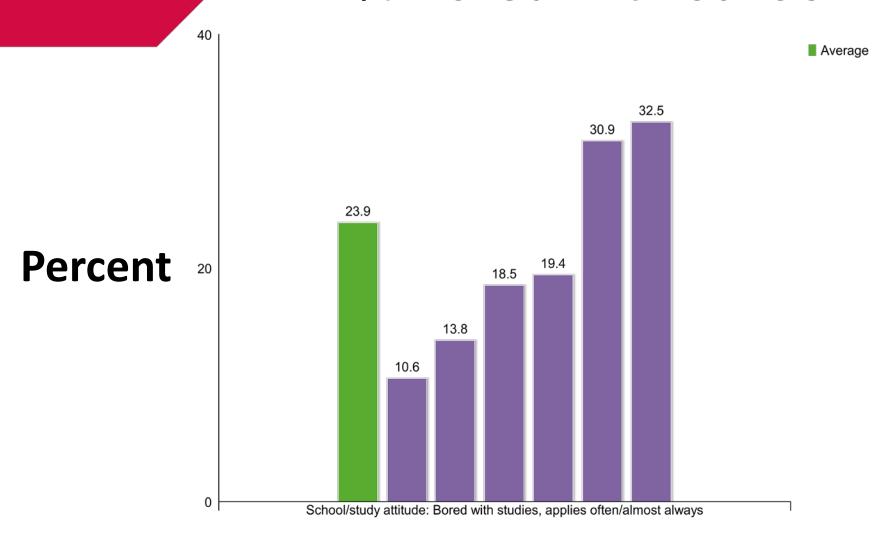
- Questionnaire
- 300 variables
- 10th Grade
- 8.422 youth
- 112 schools

#### 17 % Drunk last month



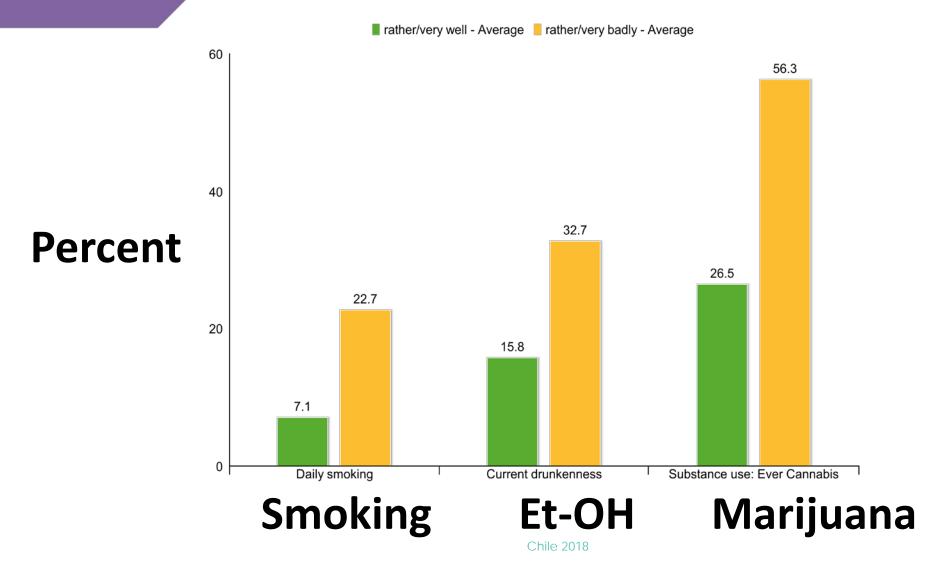
Chile 2018 37

#### 24% Bored with school



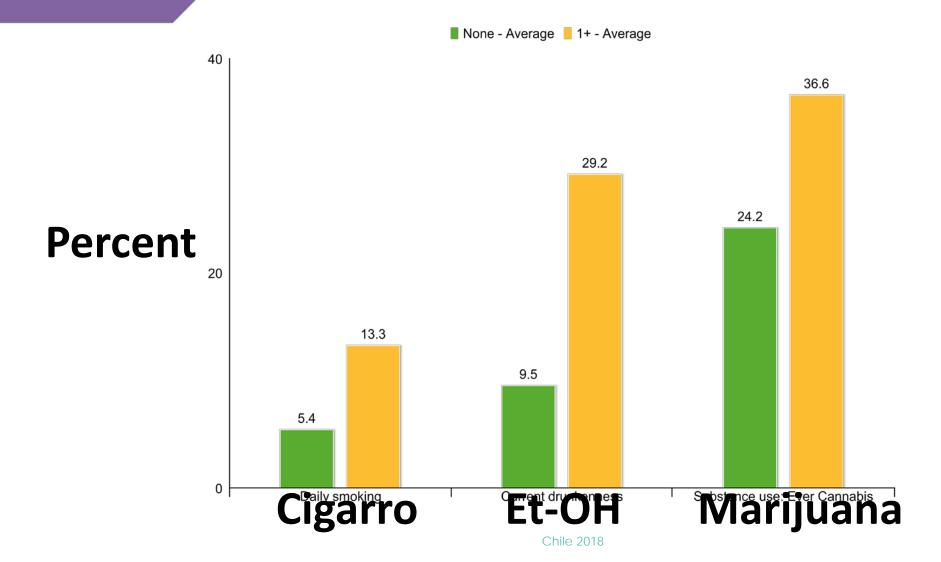
Chile 2018 38

# Consumption is higher if parents don't know where youth is on the evening



## More consumption if out after midnight

**Cross-tabulations** 



#### Conclusions:

Chilean adolescents appear to be commonly bored and poorly supervised. Together with a high degree of societal acceptance of adolescent alcohol use, high rates of other substance use thrives



Prime Minister commits to expanding prevention model to all of Chile.

Calls for continued work with scientific societies.

Thanks for your interest in working to have children free from alcohol & drugs



