

Alcohol Policy Scoring

Assessing the level of implementation of the WHO Global strategy to reduce the harmful use of alcohol in the Region of the Americas

> Pamela Trangenstein February 13, 2019



Data Sources





Global Information System on Alcohol and Health (GISAH) Resources for the Prevention and Treatment of Substance Use Disorders (ATLAS-SU)

World Bank

Principles behind Scoring Scheme

All 10 action areas of the global strategy must be represented in the scores

2

1

It should be possible in theory for all Member States in the Americas Region to attain the maximum score

3

Policy options that are more actively promulgated by the WHO should receive higher scores

More effective policies should receive higher scores than less effective policies

5

4

The scoring scheme should be grounded in scientific evidence and reflect current best practices

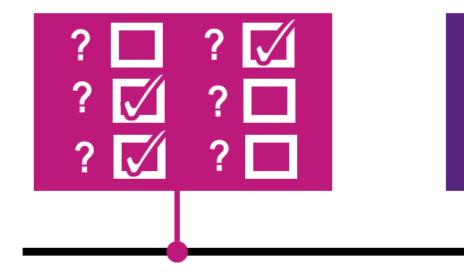
Process of Constructing Scoring Scheme

Step 1

Select a subset of questions

Step 2

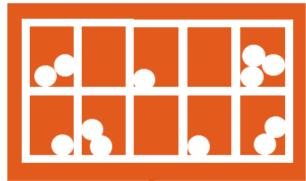
Group questions thematically to create summary indicators





Step 3

Categorize summary indicators according to 10 areas of the global strategy



Composite and Summary Indicators

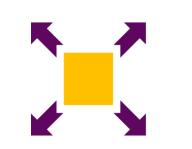
Composite Indicators	Summary Indicators	Composite Indicators	Summary Indicators
1. Leadership, awareness and commitment	1.1 National policy on alcohol1.2 Definition of alcoholic beverage1.3 Definition of standard drink1.4 Awareness activities	6. Marketing of alcoholic beverages	6.1 Legally binding restrictions on alcohol advertising6.2 Legally binding restrictions on product placement6.3 Legally binding restrictions on industry sponsorship for sporting and youth events
2. Health services' response	2.1 Screening and brief interventions for harmful and hazardous alcohol use2.2 Special treatment programmes2.3 Pharmacological treatment		6.4 Legally binding restrictions on sales promotions by producers, retailers and owners of pubs and bars
3. Community and workplace action	 3.1 School-based prevention and reduction of alcohol-related harm 3.2. Workplace-based alcohol problem prevention and counselling 3.3 Community-based interventions to reduce alcohol-related harm 	7. Pricing policies	7.1 Adjustment of taxation level for inflation7.2 Affordability of alcoholic beverages7.3 Other price measures
4. Drink–driving policies and countermeasures	 4.1 Maximum legal BAC limit when driving a vehicle 4.2 Enforcement using sobriety checkpoints 4.3 Enforcement using random breath-testing 4.4 Penalties 	8. Reducing the negative consequences of drinking	8.1 Server training8.2 Health warning labels
5. Availability of alcohol	 5.1 Lowest age limit for alcohol service on the premises and sale of alcohol for consumption off the premises 5.2 Control of retail sales 5.3 Restrictions on availability by time 5.4 Restrictions on availability by place 	9. Reducing the public health impact of illicit alcohol and informally produced alcohol	9.1 Use of duty paid or excise stamps on alcohol containers9.2 Estimates of unrecorded alcohol consumption9.3 Legislation to prevent illegal production and sale of alcoholic beverages
	5.5 Restrictions on sales at specific events 5.6 Alcohol-free public environments	10. Monitoring and surveillance	10.1 National system for monitoring 10.2 National surveys

Scale Development



Stringency

The degree of rigor or severity of the regulations



Comprehensiveness

The degree to which the regulation covers the dimension completely or broadly



Recency

The degree to which the regulation is aligned with current circumstances

Multipliers

			OR		
Multiplier Level	Description	Effectiveness	Breadth of Research Support and Cross- National Testing	Effectiveness	Breadth of Research Support and Cross- National Testing
5x	High level of effectiveness demonstrated consistently across different populations <u>OR</u> fundamental public health infrastructure needed to initiate and sustain an effective response	↓↓↓ 3	4• 1 or 2		
4 x	High level of effectiveness demonstrated in a limited number of studies and populations <u>OR</u> moderate effectiveness demonstrated consistently across different populations	↓↓↓ 3	••• 1 or 2	↓ ↓ 2	2 or 3
3x	High level of effectiveness demonstrated in a limited number of studies and populations <u>OR</u> moderate effectiveness demonstrated consistently across different populations	↓ ↓ 2	1 or 2		
2x	Moderate effectiveness demonstrated in a limited number of studies and populations	1		? unknown	
1 x	Not shown on its own to be effective but may be valuable as part of a package of policy measures	0			

Babor TF, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K. Alcohol: no ordinary commodity. Research and public policy. 2nd ed. Oxford: Oxford University Press; 2010.

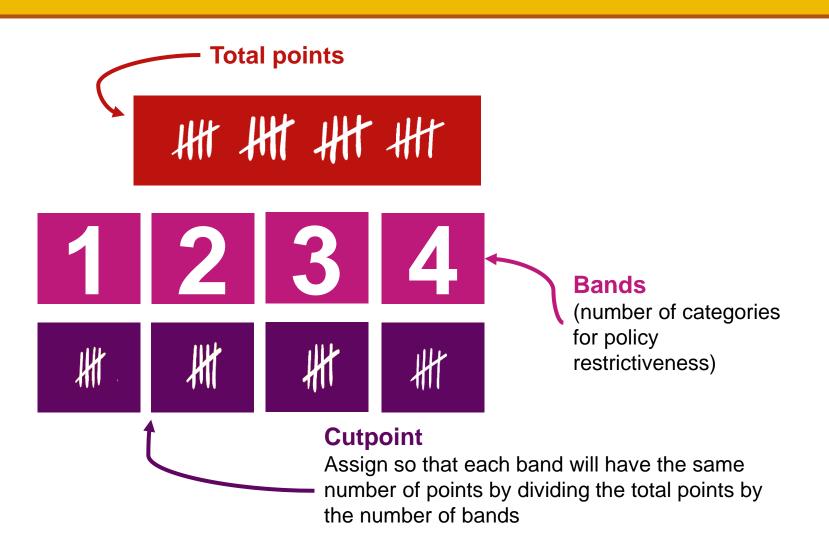
Examples of Multipliers

Policy	Multiplier
National policy on alcohol: An adopted written national policy on alcohol is defined as a written organized set of values, principles and objectives for reducing the burden attributable to alcohol in a population.	3
Definition of alcoholic beverage: A beverage over a certain percentage of alcohol by volume is defined as an alcoholic beverage	2
Definition of standard drink: A definition of a standard drink (in grams of pure alcohol) is used at the national level.	1
Awareness activities: Awareness activities are provided pertaining to the following topics: young people's drinking, drink–driving, indigenous peoples, impact on health, social harms, illegal/surrogate alcohol, alcohol at work, or pregnancy and alcohol.	2

Nested Banded Approach 1

Steps in the process:

- 1. Determine the total number of points.
- 2. Determine the number of bands.
- 3. Divide the total number of points by the number of bands. Use this value to determine the cutpoints.



Esser MB, Jernigan DH. Assessing restrictiveness of national alcohol marketing policies. Alcohol and Alcohol 2014;49(5):557-62. (https://www.ncbi.nlm.nih.gov/pubmed/25113175, accessed 6 April 2017).

Nested Banded Approach 2

There are 9 policies (3 types of media for each BWS) Each policy has 3 possible points:

Ban = 3

- Partial statutory = 2
- Voluntary = 1
- None = 0

Total possible points: 9 policies x 3 points = 27 points There are 4 bands (determined a priori) Dividing total points (27) by the number of bands (4) determines the cutpoints:

Band 1: scores with 0-7 points Band 2: scores with 8-14 points Band 3: scores with 16-20 points Band 4: scores with 21-27 points

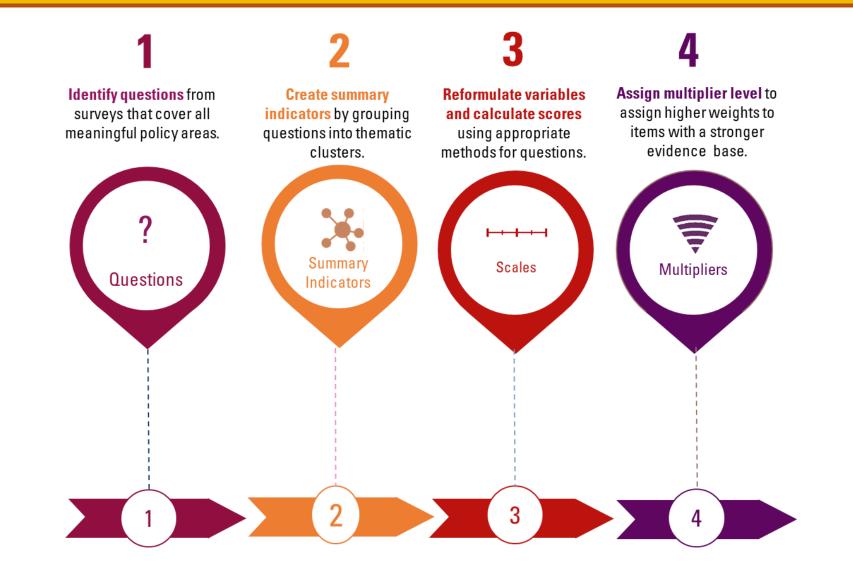
Item	Beverage type	Restriction	Points (level of restriction)
	Beer	Ban	3
National television	Wine	Partial statutory	2
	Spirits	Voluntary	1
	Beer	None	0
Cable television	Wine	Ban	3
	Spirits	Ban	3
	Beer	Ban	3
Films	Wine	Ban	3
	Spirits	Ban	3
		Total points	21
	4		
		Final score range	4
		Multiplier	3
	F	Final score for indicator	12

Affordability

10,000 x Price (calculated based on standard containers of 50 cl beer, 75 cl wine, and 70 cl spirits) (€) Gross national income at PPP per capital (current international \$)

PPP: Purchasing power parity (similar to a consumer price index)

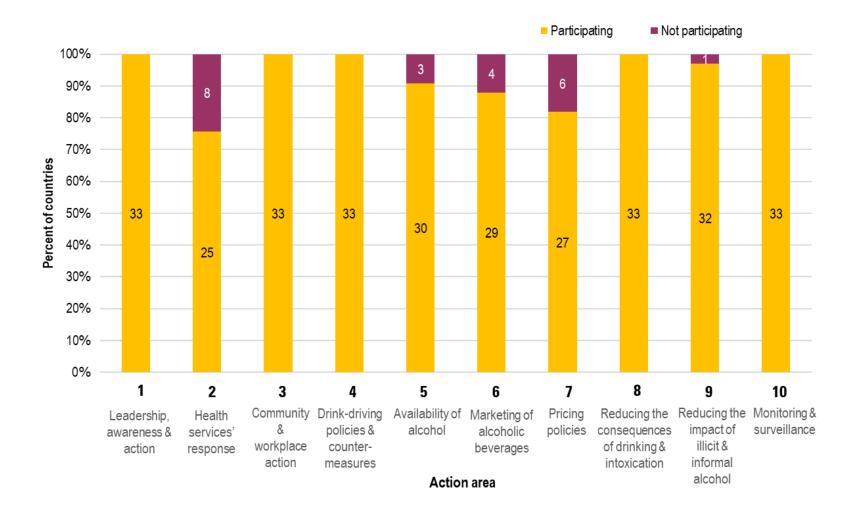
Summary of Scoring Process



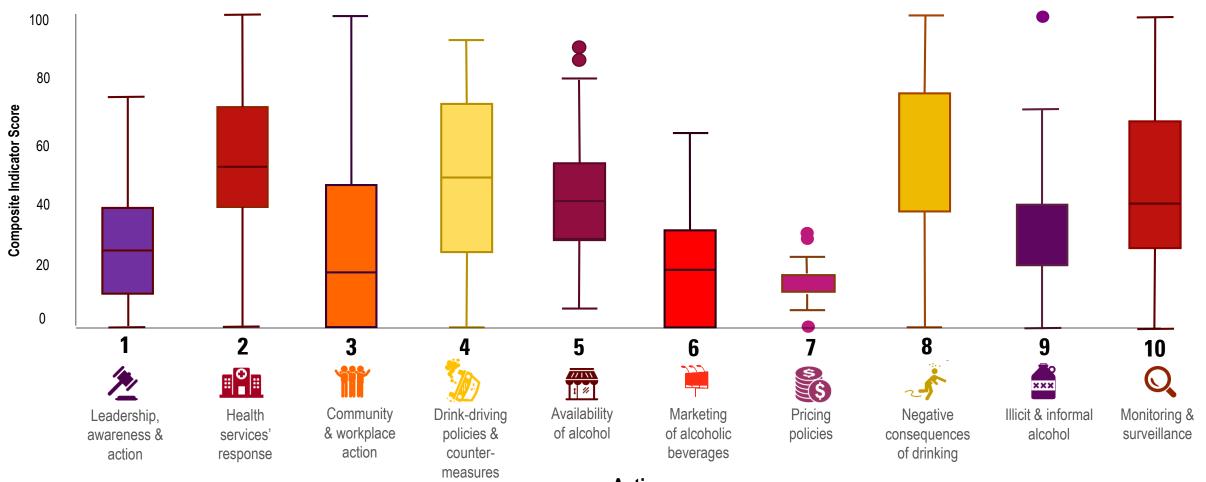
Example of a Composite Indicator Rubric

8.	Reducing the negative consequences of	of drinking and alc	ohol intoxication
8.1	Server training		
	Server training is provided on a regular basis to	bar staff and staff at s	pecial events to give them skills and knowledge about
	alcohol harm and safe serving practices.		
	Server training is offered on a regular basis	□ Yes (3 p.)	🗆 No (0 p.)
	Multiplier		x2
8.2	Health warning labels		
	Health warning labels are present with informati	on on the dangers ass	ociated with the use of the product.
	Health warning labels are legally required on	□ Yes (2 p.)	□ No (0 p.)
	alcohol advertisements		
	Health warning labels are legally required on	□ Yes (3 p.)	□ No (0 p.)
	containers/bottles of alcoholic beverages		
	Multiplier		x2
	Rubric 8 = maximum 16 points		

Response Rate



Overall Scores



Action area

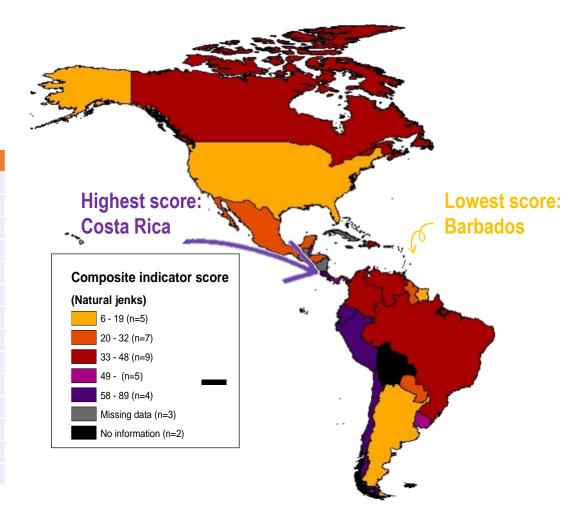
Availability Scores

Average score: 43

Median score: 45

Range of scores: 6-89

Rank	Country	Score	Rank	Country	Score
1	Costa Rica	89	15	Jamaica	45
2	Ecuador	86	18	Dominica	41
3	Chile	80	19	Antigua and Barbuda	32
4	Peru	70	19	Saint Vincent and the Grenadines	32
5	Panama	57	21	Guyana	29
6	Belize	54	21	Honduras	29
6	Uruguay	54	21	Mexico	29
8	Saint Kitts and Nevis	51	21	Saint Lucia	29
9	Trinidad and Tobago	51	25	Paraguay	23
10	Brazil	48	26	Grenada	19
10	Canada	48	27	United States of America	17
10	Colombia	48	28	Argentina	13
10	Dominican Republic	48	29	Suriname	10
14	Venezuela	47	30	Barbados	6
15	Bahamas	45			
15	El Salvador	45			



Pricing Scores

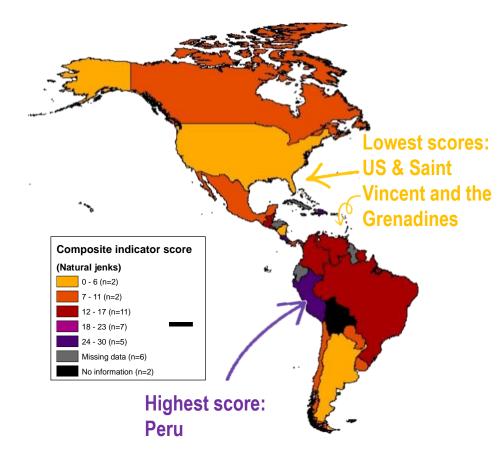
Average score: 14

Median score: 11

Range of scores: 0-30

Rank	Country	Score
1	Peru	30
2	Costa Rica	29
2	Dominican Republic	29
4	Jamaica	23
4	Saint Lucia	23
6	Belize	17
6	Brazil	17
6	Colombia	17
6	Venezuela	17
6	El Salvador	17
6	Suriname	17
6	Guatemala	17
13	Chile	11
13	Panama	11

Rank	Country	Score
13	Uruguay	11
13	Saint Kitts and Nevis	11
13	Trinidad and Tobago	11
13	Canada	11
13	Bahamas	11
13	Dominica	11
13	Mexico	11
13	Paraguay	11
13	Grenada	11
24	Argentina	6
24	Nicaragua	6
26	Saint Vincent and the Grenadines	0
26	United States of America	0



Marketing Scores

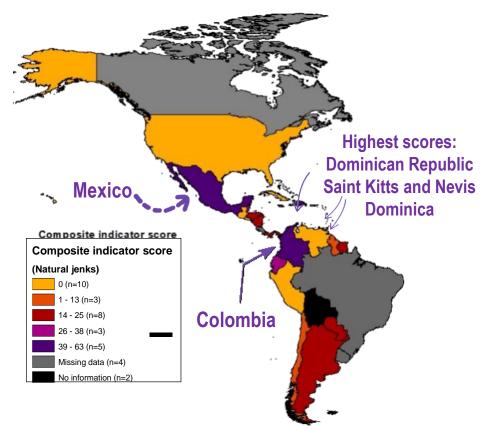
Average score: 21

Median score: 19

Range of scores: 0-63

Rank	Country	Score
1	Dominican Republic	63
1	Colombia	63
1	Saint Kitts and Nevis	63
1	Dominica	63
1	Mexico	63
6	Belize	38
7	Jamaica	31
7	Ecuador	31
9	Suriname	25
9	Trinidad and Tobago	25
9	Paraguay	25
12	Panama	19
12	Argentina	19
12	Nicaragua	19
12	Antigua and Barbuda	19
12	Honduras	19

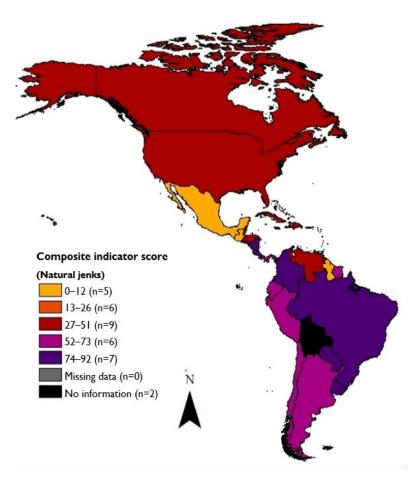
Rank	Country	Score
17	Chile	13
17	Guyana	13
19	Bahamas	6
19	Peru	0
19	Saint Lucia	0
19	Venezuela	0
19	El Salvador	0
19	Guatemala	0
19	Grenada	0
19	Saint Vincent and the Grenadines	0
19	United States of America	0
19	Barbados	0
19	Cuba	0



Drink-Driving and Health Services' Response Scores

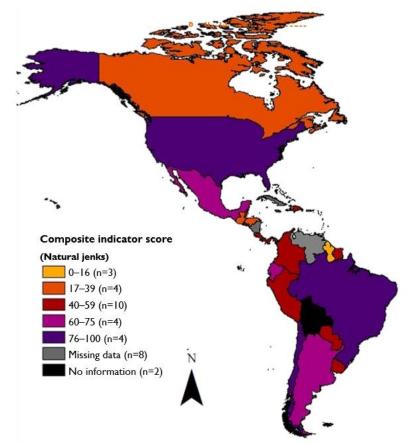
Drink-driving policies & countermeasures

(Average: 48, Median: 48, Range: 0-92)

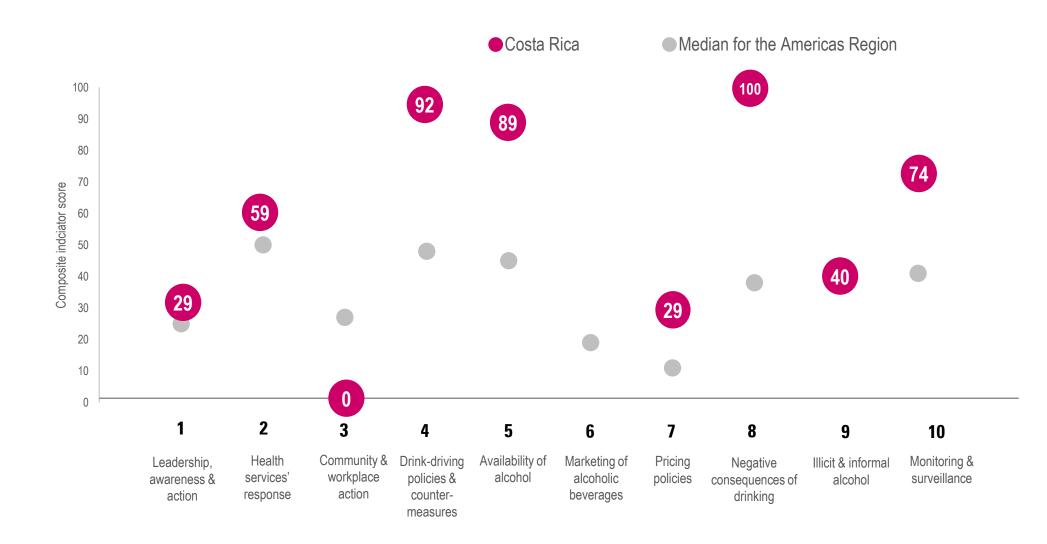


Health services' response

(Average: 53, Median: 51, Range: 0-100)

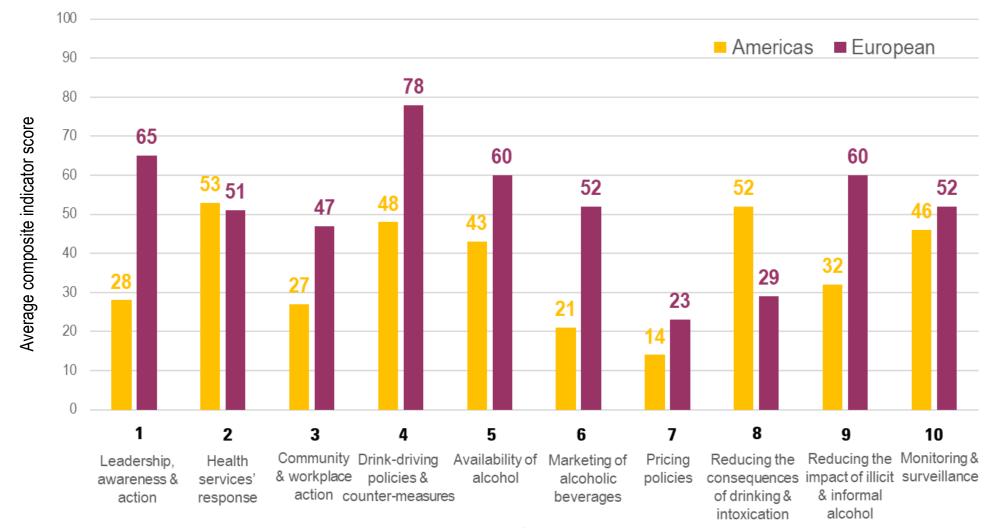


Example Country Profile: Costa Rica



NOTE: Costa Rica did not have enough data to calculate the composite indicator for marketing of alcoholic beverages. It was also missing data from community and workplace action but had enough data to calculate this composite indicator. It is possible that the score for this composite indicator would be higher if these data were available.

Comparison with European Region



Action area

Limitations

Limitations of the Data



Missing Data

There are large amounts of missing data in some policy areas



Reliability

Some data have lower reliability



Enforcement

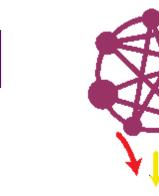
Policy enforcement is not measured



Time-Specific

The composite indicators may need to be adjusted when new data/research are/is available

Limitations of the Method



Other Data

Some aspects (e.g., policy

methods

weights) could use other data or

Aggregation

National-level summaries do not reflect subnational variations in alcohol policy



Interpretation

Summary measures are prone to misinterpretation

Strengths





Accountability

Promote political accountability

Evaluation

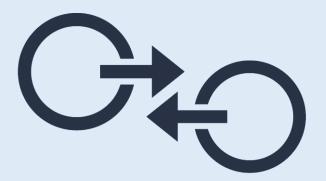
Provides an evaluation of national alcohol strategies



Comprehension

May be easier to understand a "big picture" or overarching measure of the policy environment

Facilitates comparisons...



between countries



Thank You

