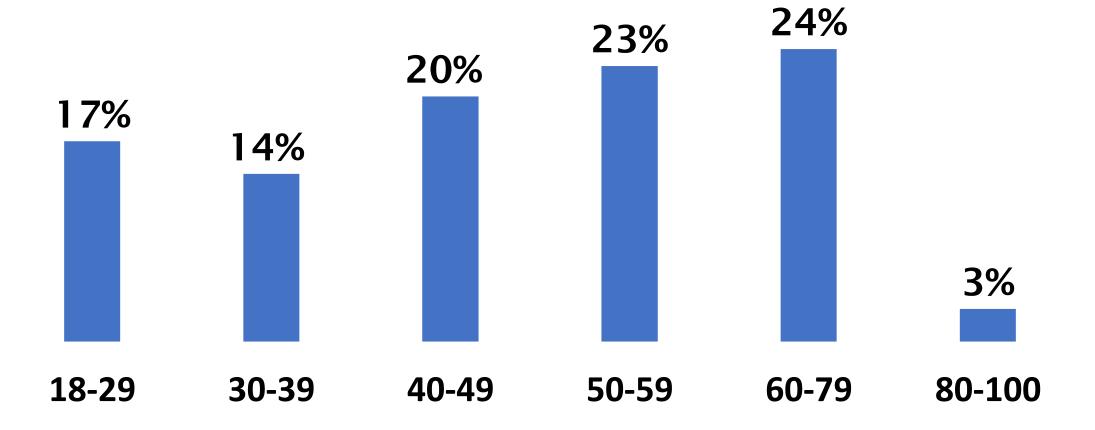
### 江山市饮酒现状调查报告 Alcohol Use in Jiangshan: Survey Report & Response Options

Ted Miller & Chris Ringwalt HBSA <u>miller@pire.org</u> 301-593-7471

### Surveys

- HBSA/Gallup N = 2984 adult respondents in June 2018
  - N = 1491 Jiangshan
  - N = 1493 Lanxi
- Gallup N = 3000 adult respondents in November/December 2016
  - N = 1500 Jiangshan
  - N = 1500 Lanxi
- School surveys in May 2017 & September 2018
  ABI N = 2621 in 2017, HBSA N = 1583 in 2018
- ABI intercept survey in May 2017
  - N = 526 regular drinkers ages 18-50 in Jiangshan

#### Adult respondents by age group, 6/2018 (6% under 30 in 11/2016)

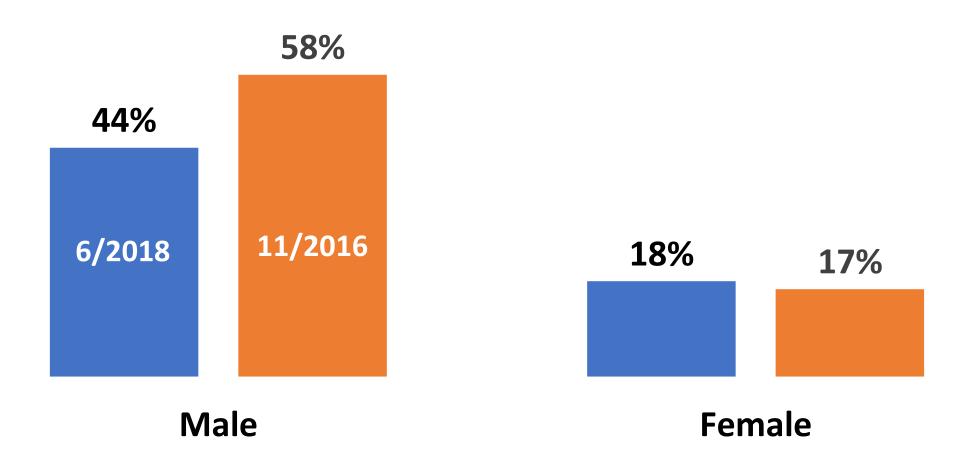




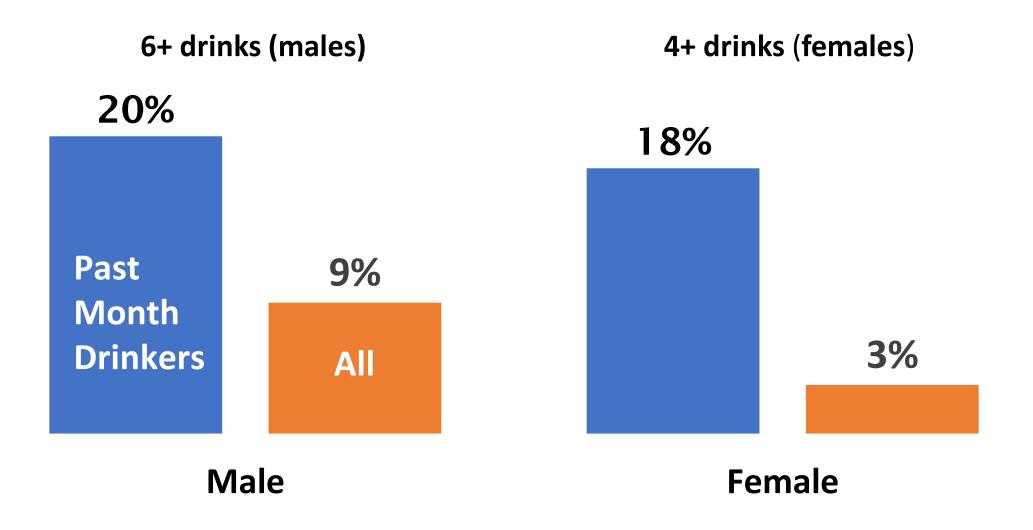
#### 酒精类产品消费行为习惯(成年人) Alcohol Products Consumption Habits and Behaviors (Adults)



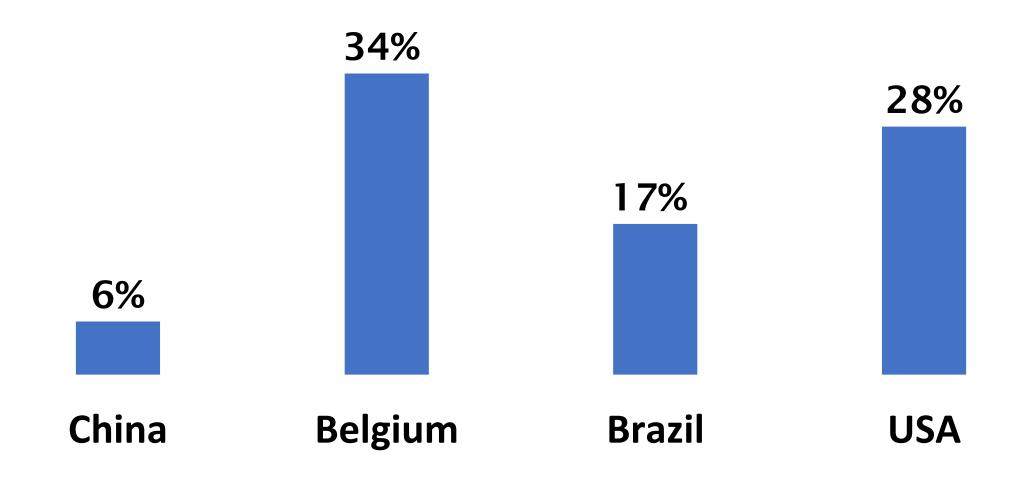
#### Adult past-month alcohol use by sex



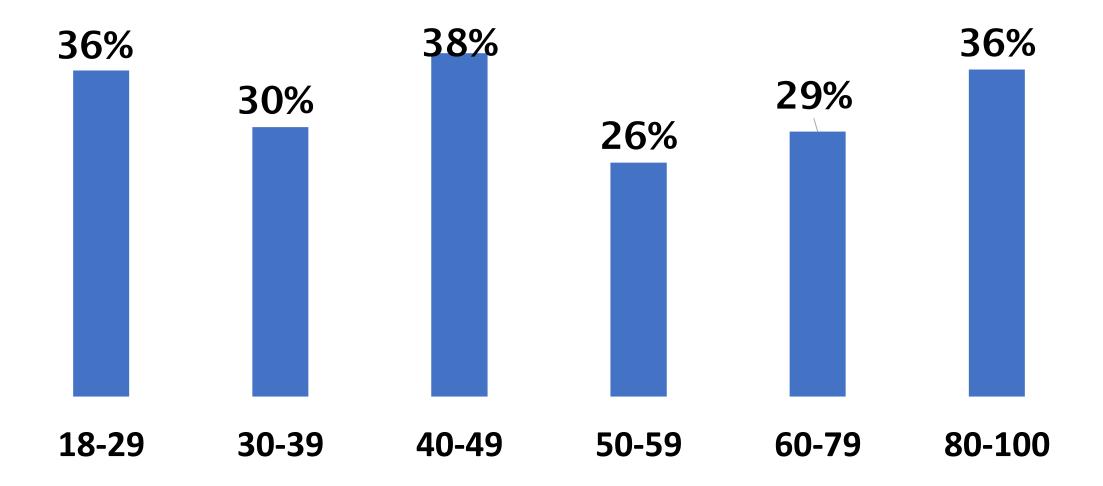
# Prevalence of heavy drinking in the past 30 days by sex – US 28%, belg 34%,



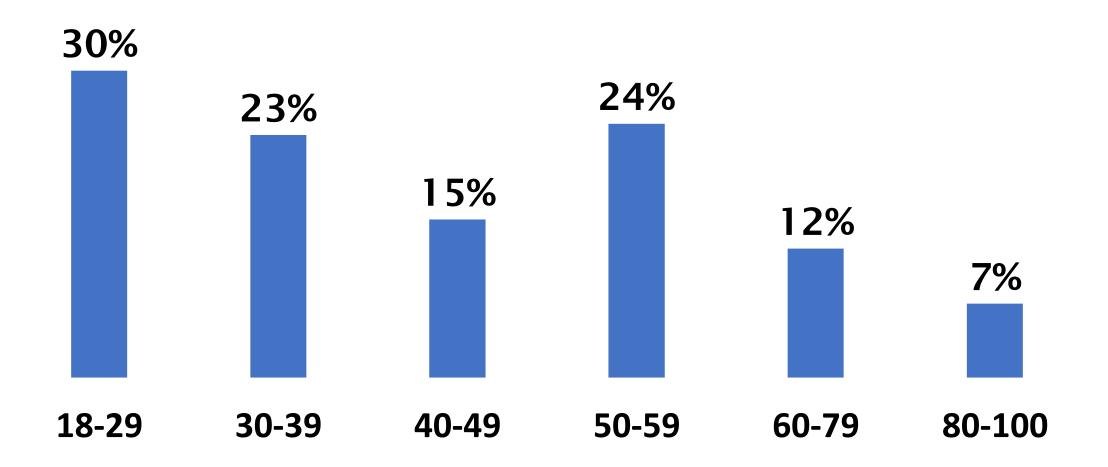
#### % Drank Heavily in the Past 30 Days by Country



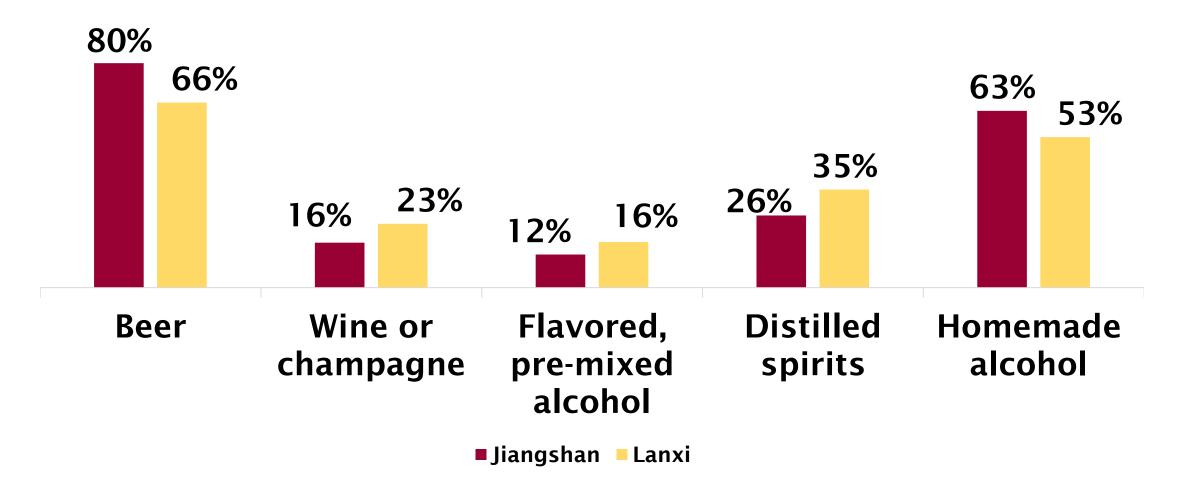
#### Adult past-month alcohol use by age group



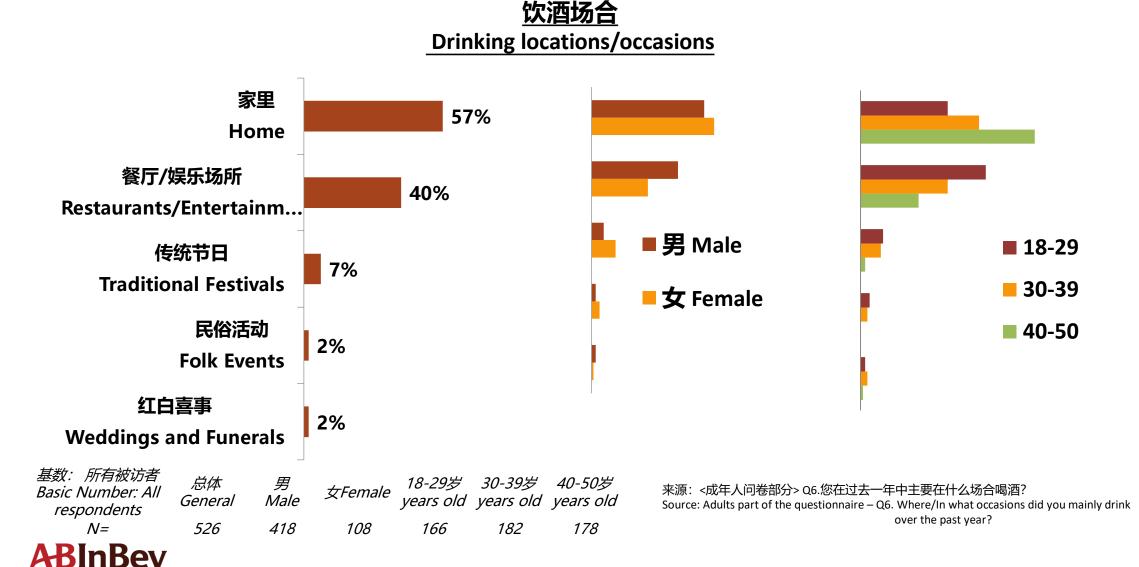
# Prevalence of heavy drinking in the past 30 days (among adults who drank in the past 30 days) by age



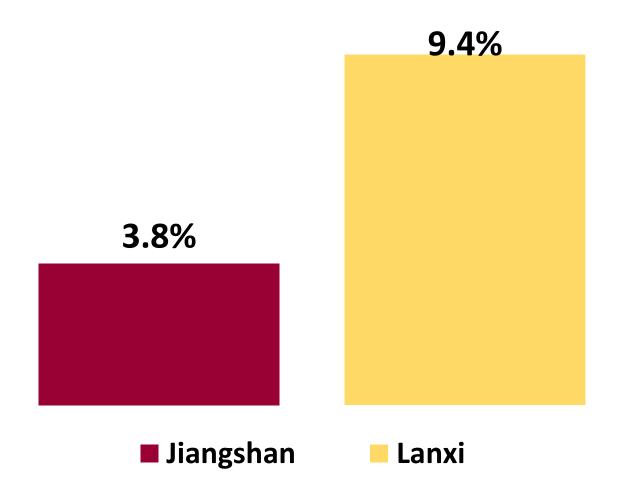
Prevalence of different types of alcohol consumption in the past 30 days (of those who drank in the past 30 days)



家是最主要的饮酒场合。男性及18-29岁人群在餐厅/娱乐场所饮酒的比例高于其他人群。 Respondents mainly drink at home. Compared with other respondent groups, a higher proportion of males and those between 18-29 years old drink in restaurants and entertainment venues.



Prevalence of non-alcoholic beer consumption in the past 30 days (of those who drank in the past 30 days) : 1.2% of all Jiangshan adults



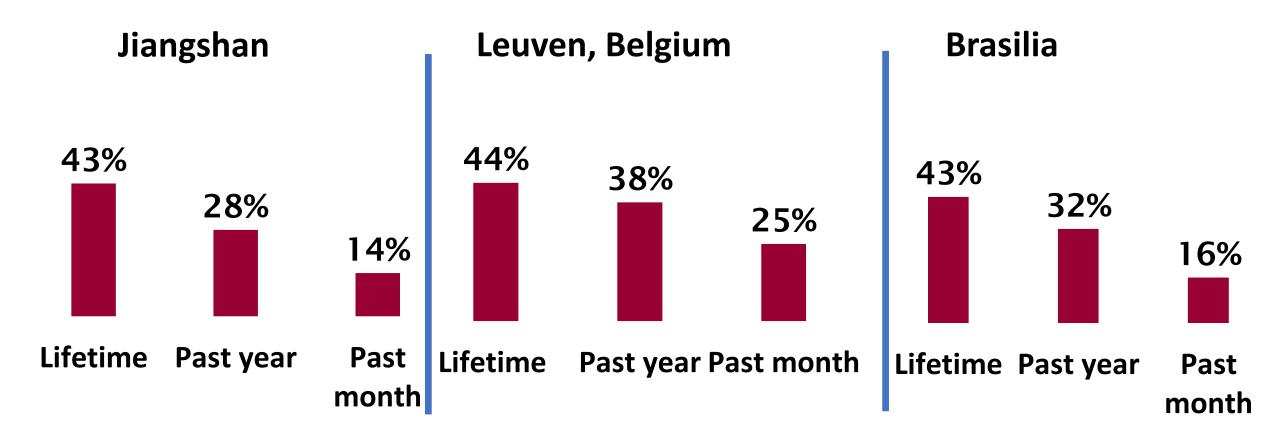


#### · 酒精类产品消费行为习惯(未成年人)

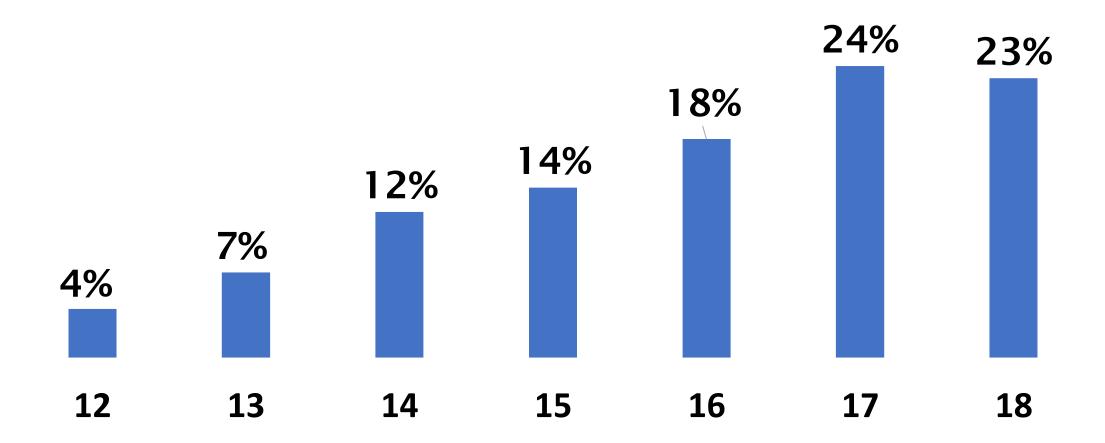
#### • Alcohol Products Consumption Habits and Behaviors (Underage)



### Youth Alcohol Use

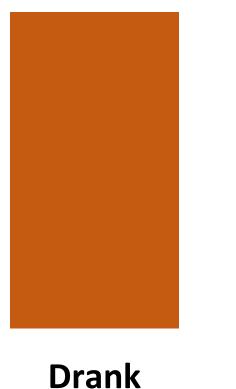


#### Student past-month alcohol use by age



#### Only 1.5% of youth binge-drank in the past month

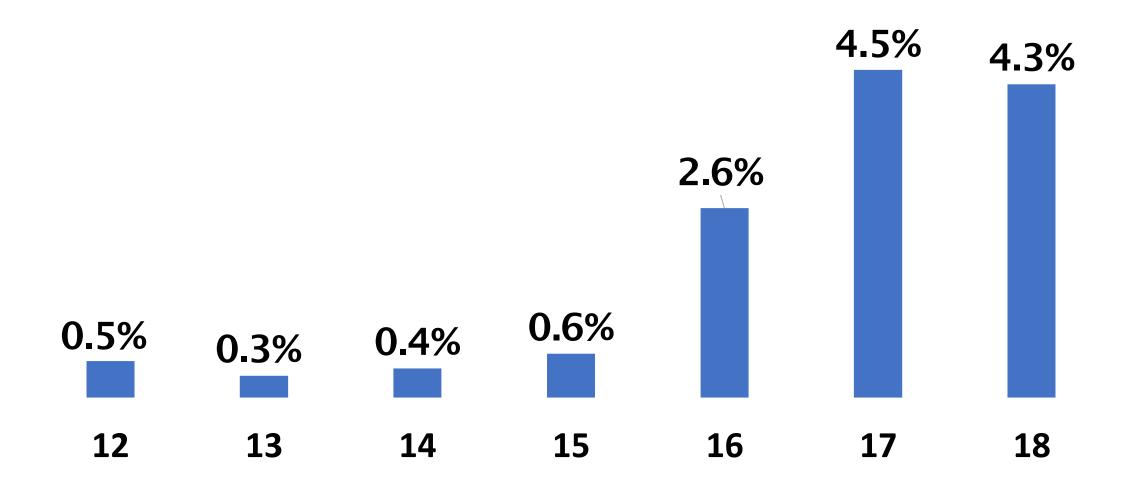
13.9%



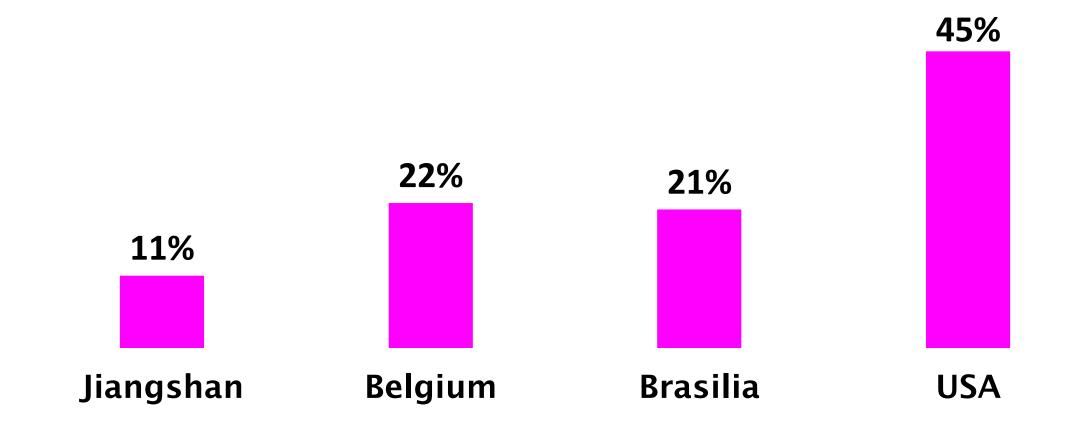
1.5%

4 in 2 Hours

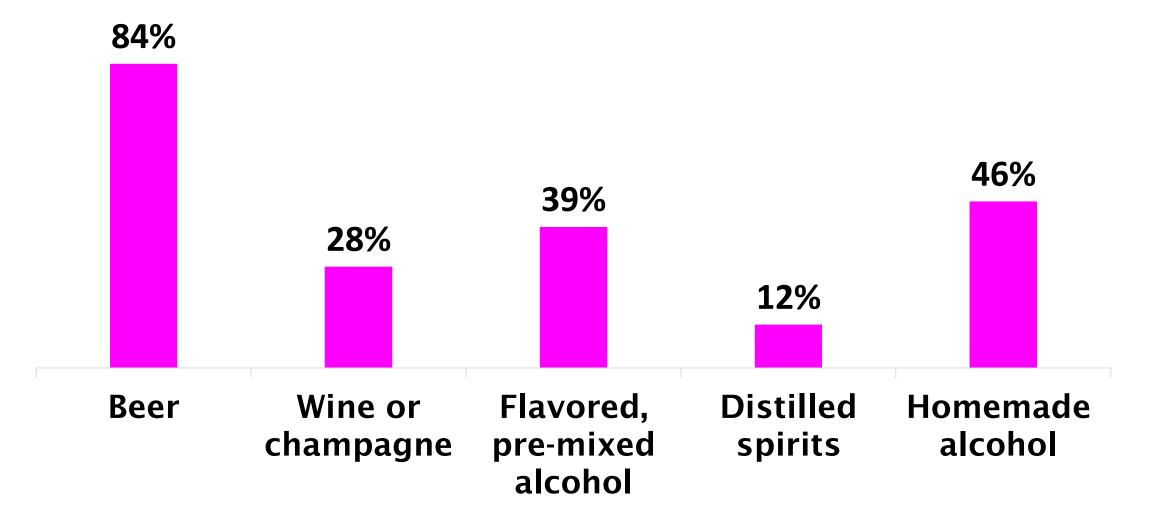
#### Student past-month binge by age



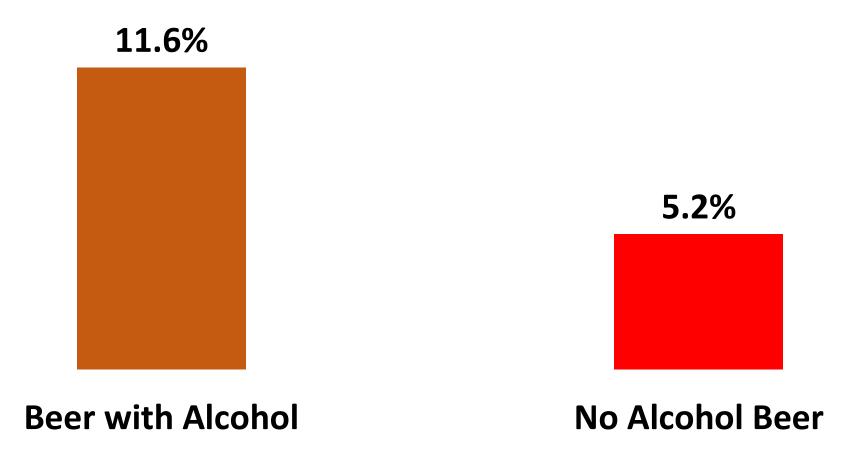
#### % of Past-Month Youth Drinkers Who Binge-Drank



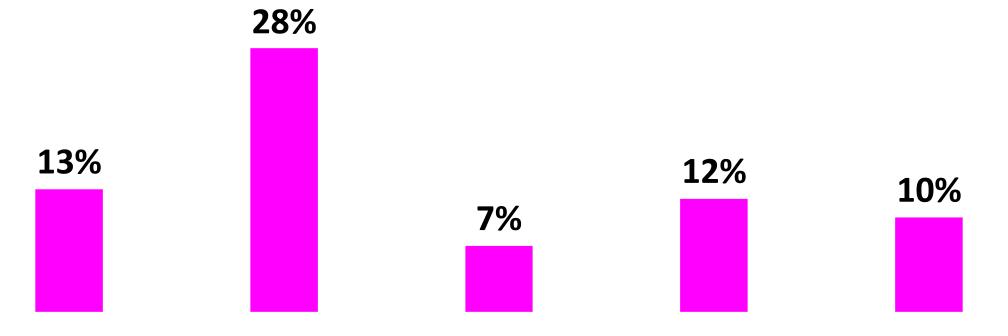
#### Kinds of Alcohol Youth Drank in the Past 30 Days



#### Youth Beer Consumption in the Past 30 Days

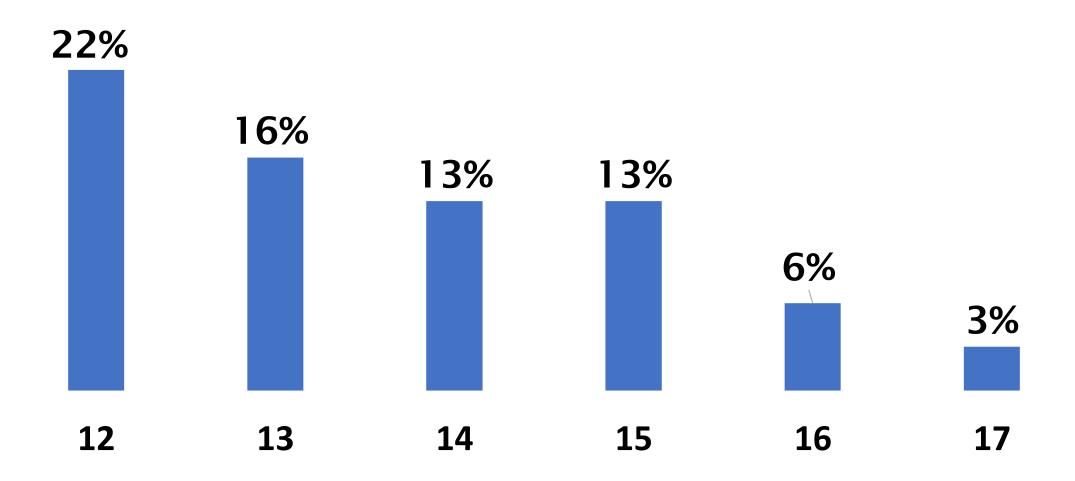


#### Youth Purchase Practices in the Past Year

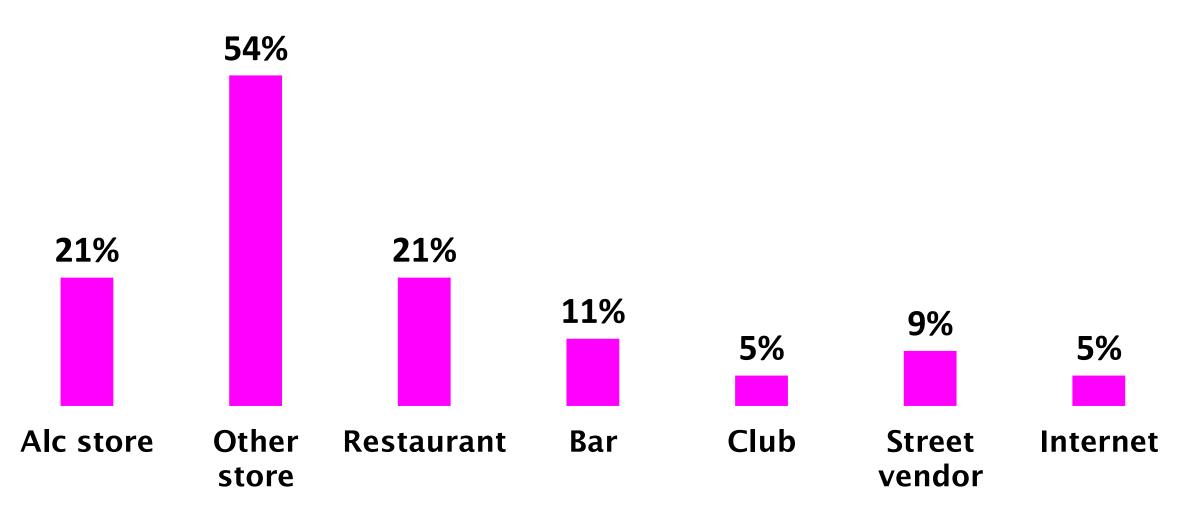


Parent sentTried to buy Ever refusedTried to buy Ever refusedfor alcoholalcoholserviceNABNABNABNAB

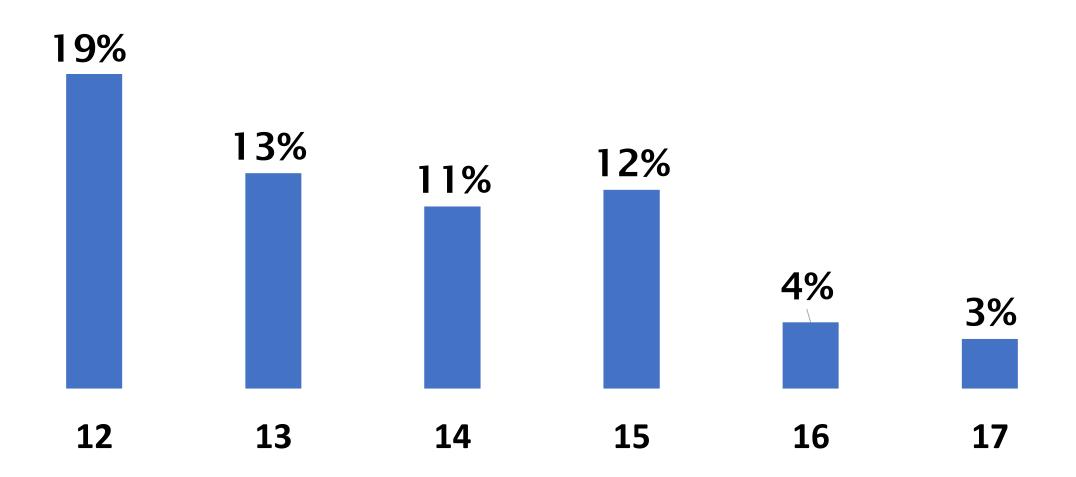
#### **Ever Refused Service for NAB by Age**



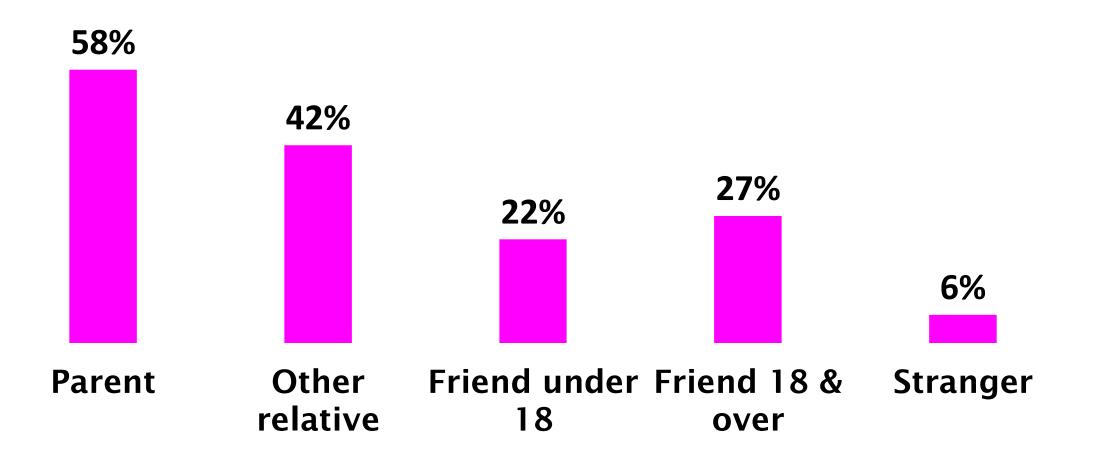
# Where Youth Bought Alcohol in the Past Year (% of past-year drinkers)



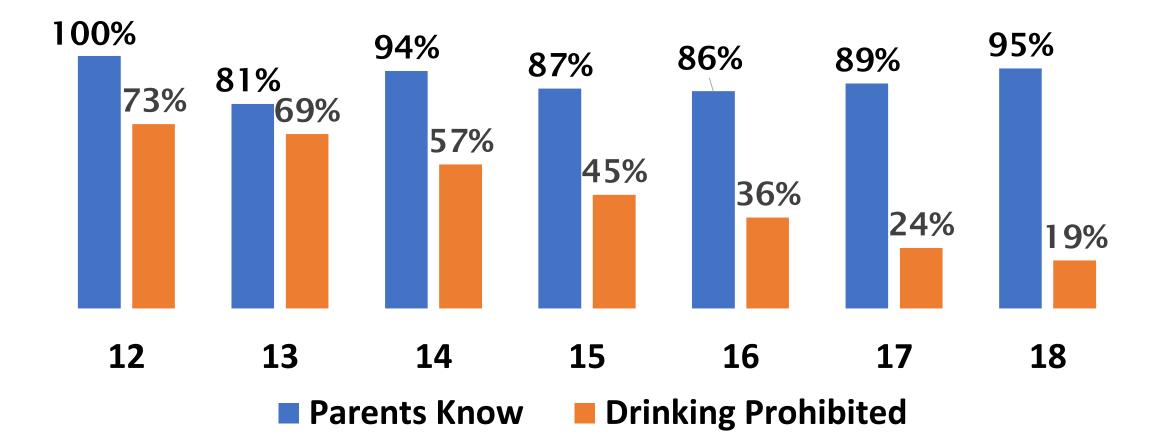
#### **Ever Asked for ID When Buying Alcohol by Age**



# Who Gave Youth Alcohol in the Past Year (% of past-year drinkers)

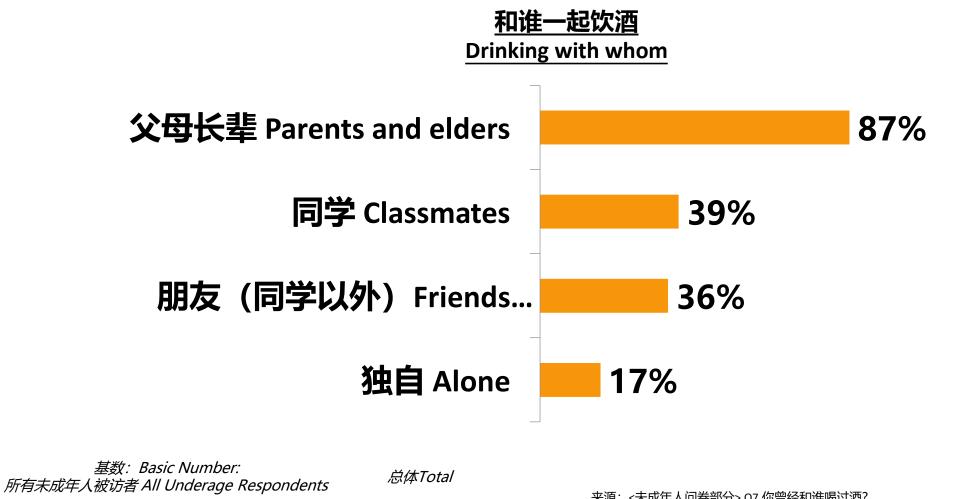


#### 88% of those who drink say at least 1 parent knows; 50% of all parents explicitly prohibit drinking



#### 87%的未成年人曾与父母长辈一起饮酒

87% of the underage respondents have consumed alcohol with parents & elders





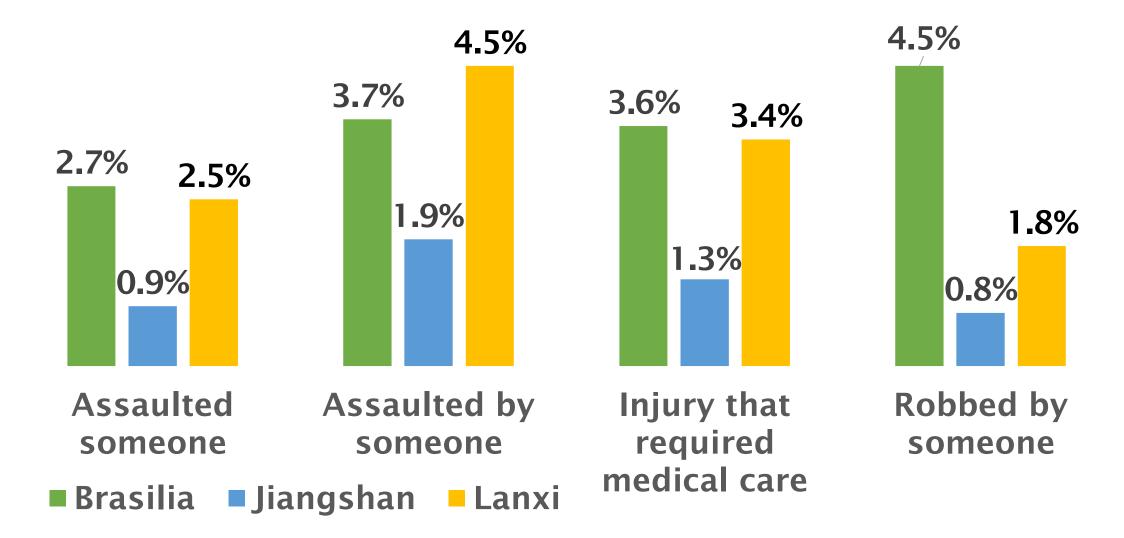
N=

来源:<未成年人问卷部分> Q7.你曾经和谁喝过酒? Source: Underage part of the questionnaire – Q7. With whom have you consumed alcohol drinks?

# Prevalence of different types of alcohol problems



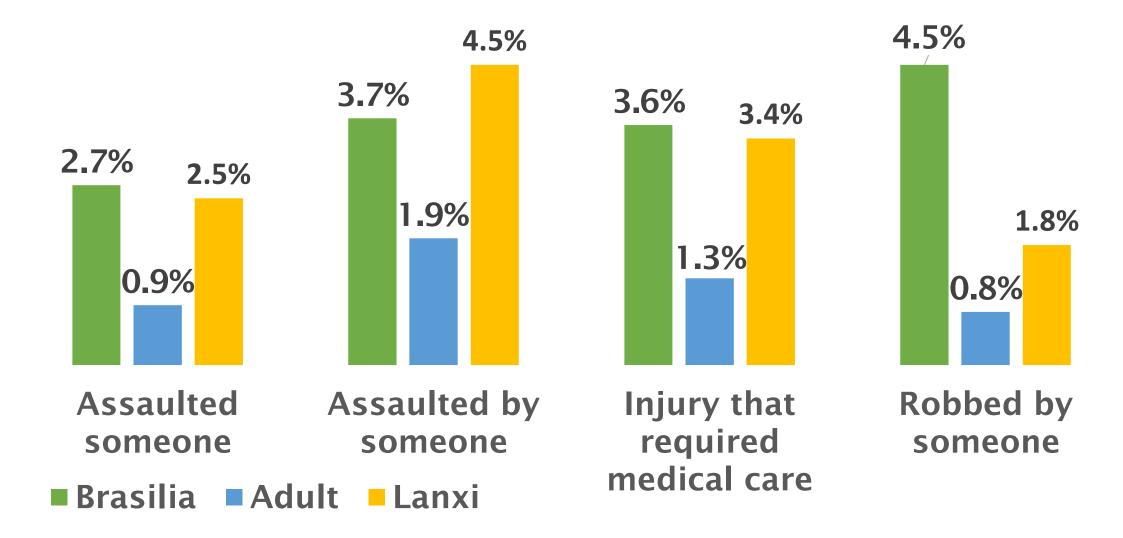
### Alcohol problems in past 12 months (among adults who drank in the past 12 months): Brazil vs China



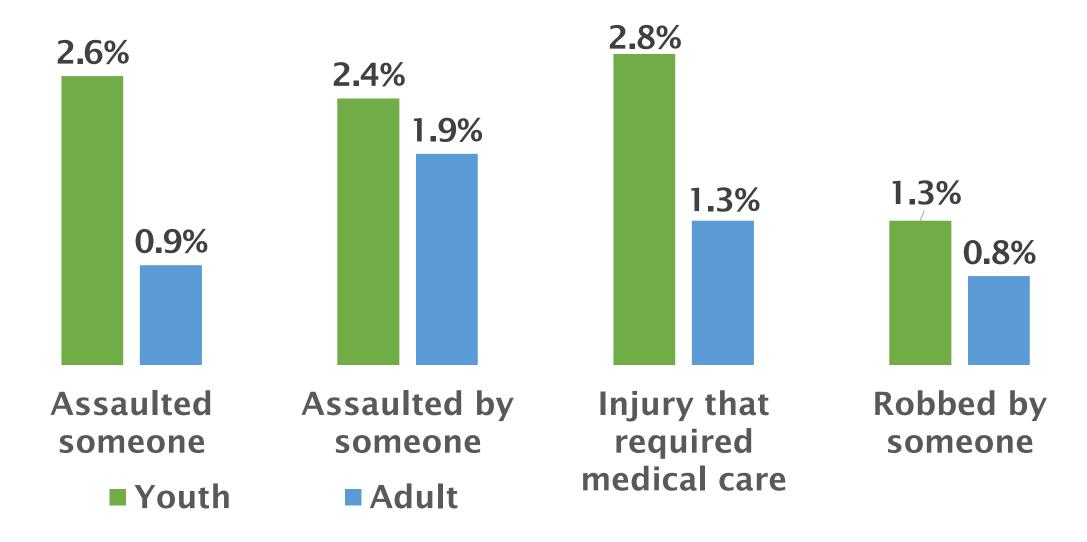
### 57% of assaults in Jiangshan involved alcohol



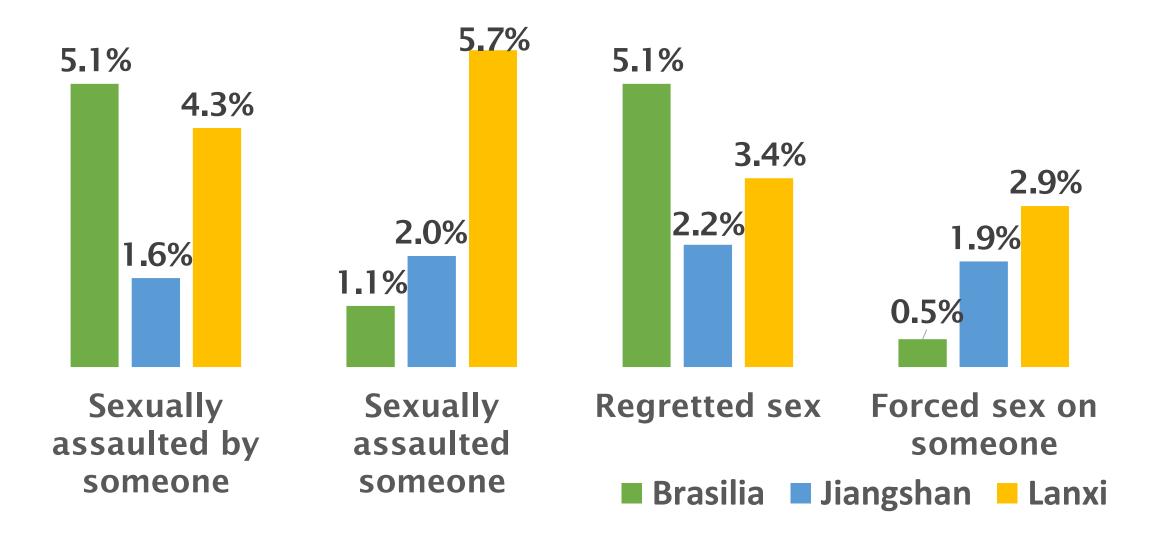
### Alcohol problems in past 12 months among adults who drank in the past 12 months: Brazil vs China



## Alcohol problems in past 12 months among youth and adults who drank in the past 12 months in Jiangshan



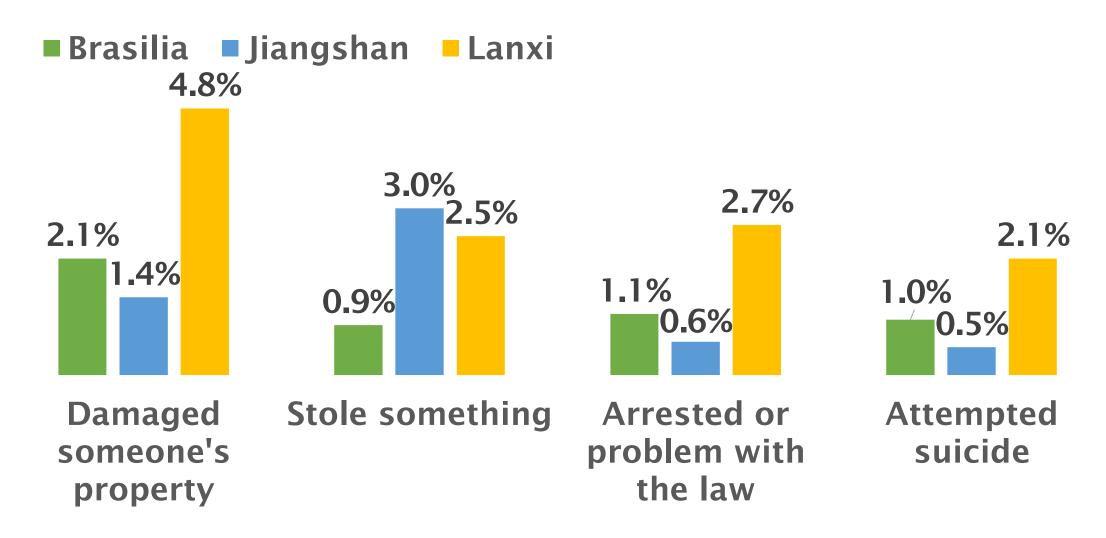
### Alcohol problems in past 12 months among adults who drank in the past 12 months: Brazil vs China



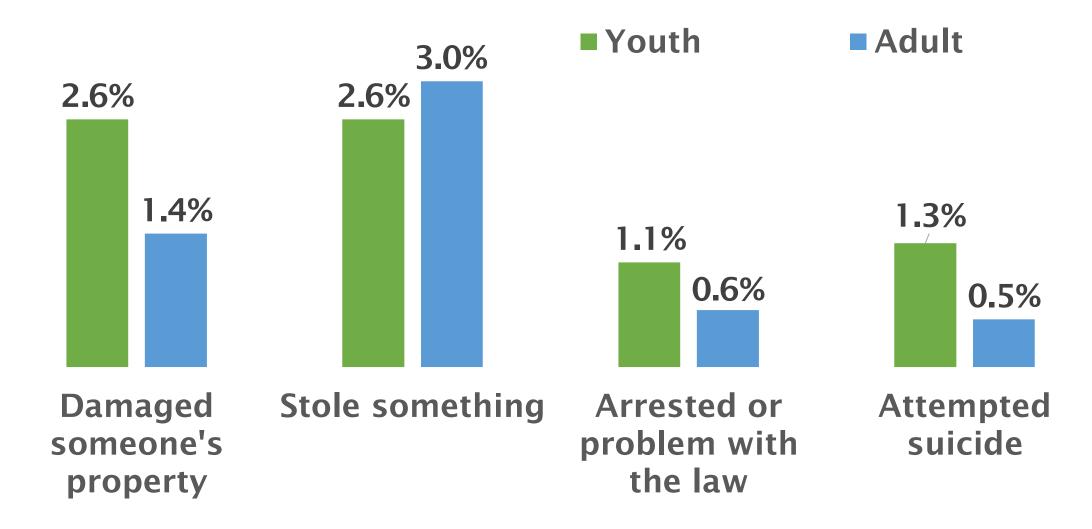
### Alcohol problems in past 12 months among youth adults who drank in the past 12 months in Jiangshan



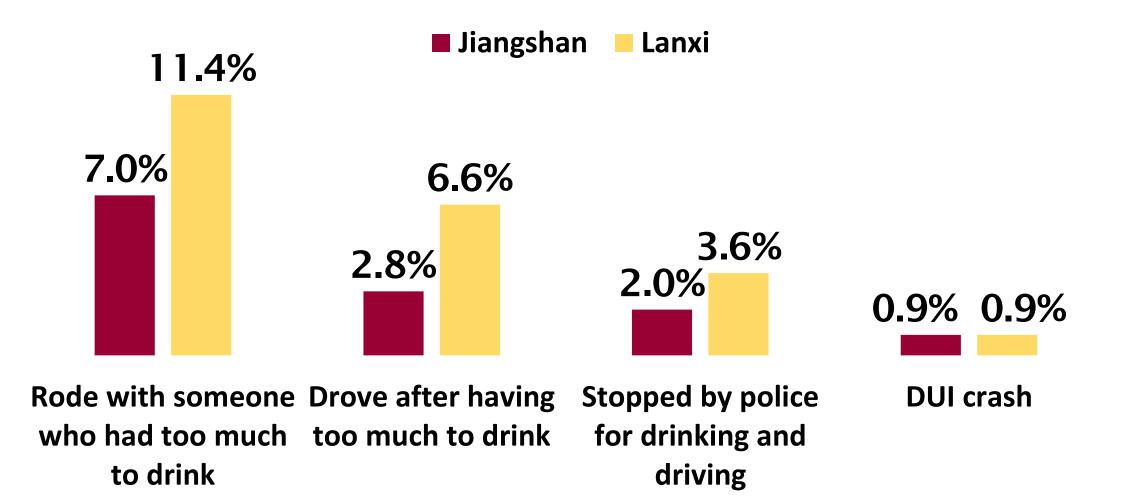
### Alcohol problems in past 12 months among adults who drank in the past 12 months: Brazil vs China



## Alcohol problems in past 12 months among youth adults who drank in the past 12 months in Jiangshan



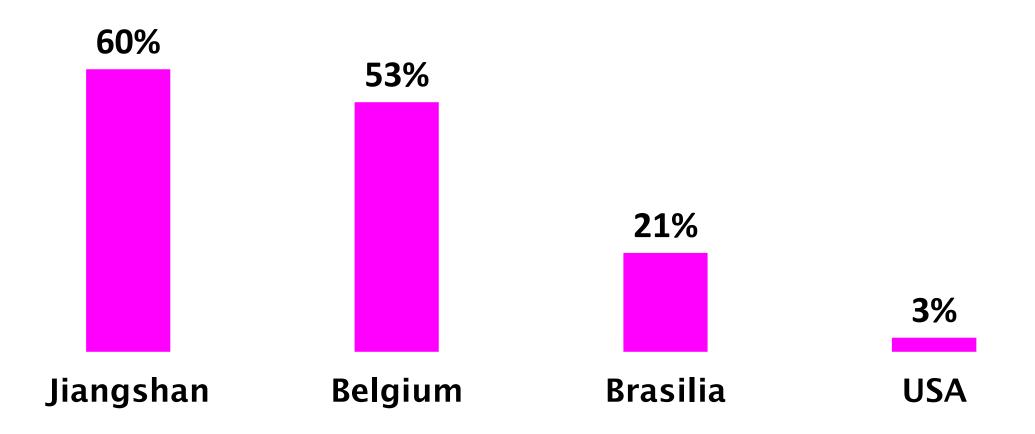
Prevalence of different types of alcohol problems in the past 12 months among adults who drank in the past 12 months



### 26% of crashes in Jiangshan involved alcohol

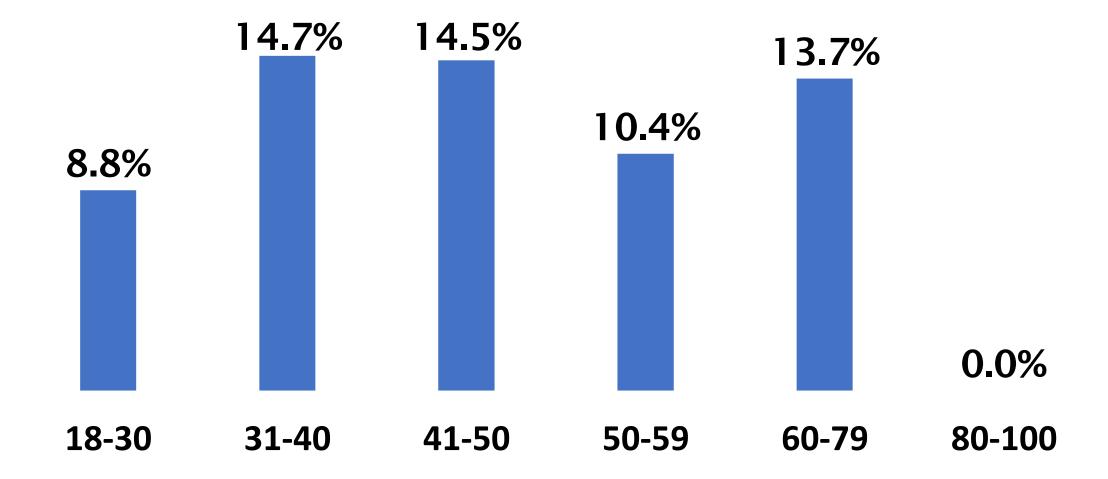


Jiangshan Has High-Intensity Enforcement % of Those Who Drove Drunk in the Past Year Who Police Stopped for Drink-Driving in the Past Year

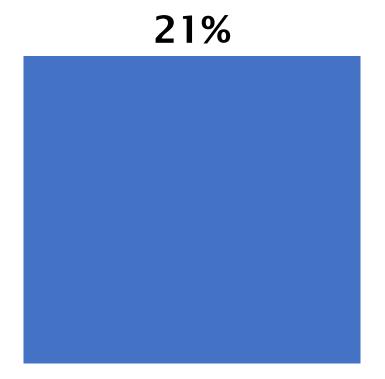


#### **Screening & Brief Intervention**

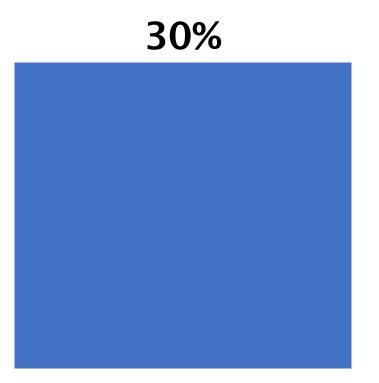
#### >=2 alcohol abuse symptoms by age group (adults who drank in the past 12 months)



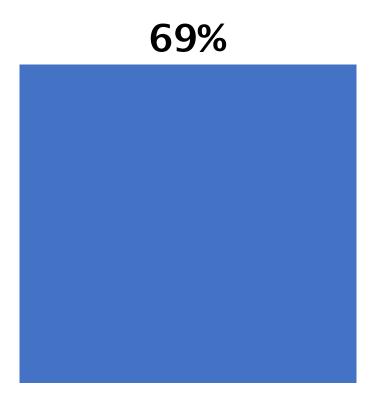
#### In the past 12 months, did you talk about your health with a doctor, nurse or other health care worker? (adults who drank in the past 12 months)



In the past 12 months, did a Doctor or Healthcare Worker ask you about how much alcohol you drink? (adults who drank in the past 12 months and talked to a health care professional)



In the past 12 months, did a Doctor or Healthcare Worker advise you to reduce or stop drinking alcohol? (adults who drank in the past 12 months and talked to a health care professional about their drinking)



### Drug Use to Get High Is Minimal

Less than 2% of respondents

**Mostly prescription misuse** 

#### **How We Measure Harmful Drinking**

## WHO & UN Worldwide Goal: Reduce Harmful Drinking by 10%

One objective of ABI & ABIF Global Smart Drinking Goals Initiative is to forge publicprivate partnerships which meet that goal in 6 cities



## **Primary Evaluation Measure**

Alcohol-related Harm Reduced =

Years of Healthy Life gained (or their financial equivalent)



Harm prevented or treated	Years of Healthy Life
One year of underage drinking	0.030
Consumption of 1000 drinks among continuing underage drinkers	0.017
One year of binge drinking	0.055
Consumption of 1000 drinks by continuing binge drinkers	0.041
One drink driving crash	0.343
One violent crime	0.218
One property crime	0.007
One alcohol use disorder	0.431

ABInBev Foundation

## Where Did Those Come From

#### My published US studies

- Costs of Alcohol-Involved Crashes, United States, 2010, E Zaloshnja, T Miller, L Blincoe, Annals of Advances in Automotive Medicine, 57, 3-12, 2013.
- Substance Abuse Prevention Dollars and Cents: A Cost-Benefit Analysis, T Miller, D Hendrie, Rockville MD: Substance Abuse and Mental Health Services Administration, DHHS Publication No. (SMA) 07-4298, 2009.
- Societal Costs of Underage Drinking, T Miller, D Levy, R Spicer, D Taylor, *Journal of Studies on Alcohol*, 67:4, 519-528, 2006.
- The Costs of Alcohol and Drug-Involved Crime, T Miller, D Levy, M Cohen, K Cox, *Prevention Science*, 7:4, 333-342, 2006.
- Calculations based on updates of those studies
- Where possible, will create country-specific estimates (e.g., YHL lost per death)



## **The Survey Shows # of Incidents**

- Multiply times the years of healthy life lost from the table
- Alcohol-related illness is computed as drinks consumed times the years of healthy life lost per drink in Zhejang Province, China (from the Global Burden of Disease study)

GBD 2016 DALY Collaborators. Global, Regional, and National Disability-Adjusted Life-Years (DALYs) for 333 Diseases and Injuries and Healthy Life Expectancy (HALE) for 195 Countries and Territories, 1990–2016: A Systematic Analysis for the Global Burden of Disease Study 2016, The Lancet, 390:10010, 1260-1344, 2017.



## **Harm Calculation Example**

# Harm Calculations: YHLs saved = # DUI crashes reduced \* .343 YHL/crash

#### % reduction = YHLs saved / total YHLs lost to drinking in the city in 2015

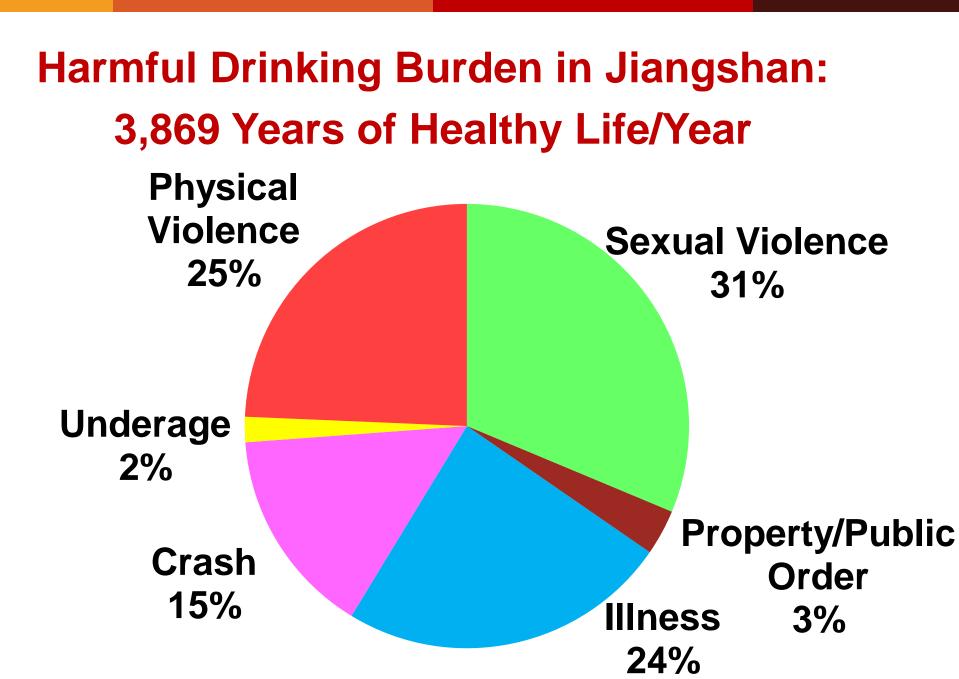
### The goal is a 10% reduction in that number



## **EVALUATION STEPS**

- **1. Evaluate change in outcomes**
- 2. Use the table to convert changes in outcomes into changes in YHLs
  - YHLs saved = change in outcome \* YHL per unit of outcome
- 3. Compute % reduction in harmful drinking
  - % reduction = YHLs saved / YHLs lost to harmful drinking in the city pre-intervention





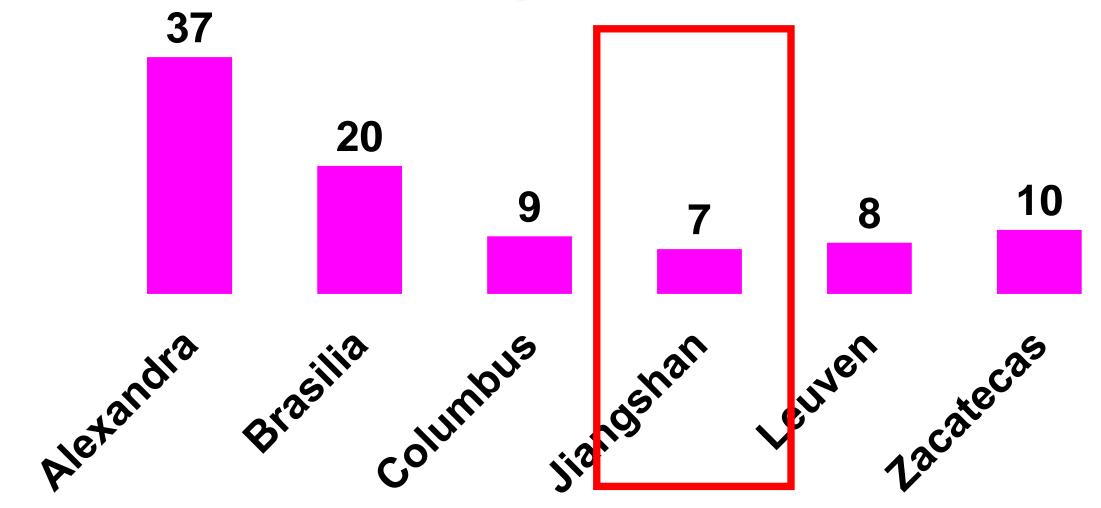
#### **ABInBev**

#### **Jiangshan Baseline Data**

Population: 5	80,000	Incidents By Category:	
YHL By Categ	ory:	Sexual Violence	2,731
Sexual Violen	ce 1226	<b>Physical Violence</b>	8,285
Physical Viole	ence 953	Crashes	1,726
Crash	592	Years of Illness	2,235
Illness	963	<b>Property Crimes</b>	18,792
Property	132		

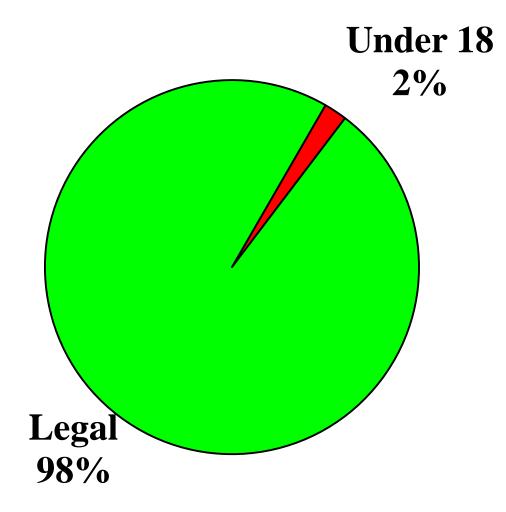
#### Underage 72

## YHL Lost to Harmful Drinking per 1000 Population





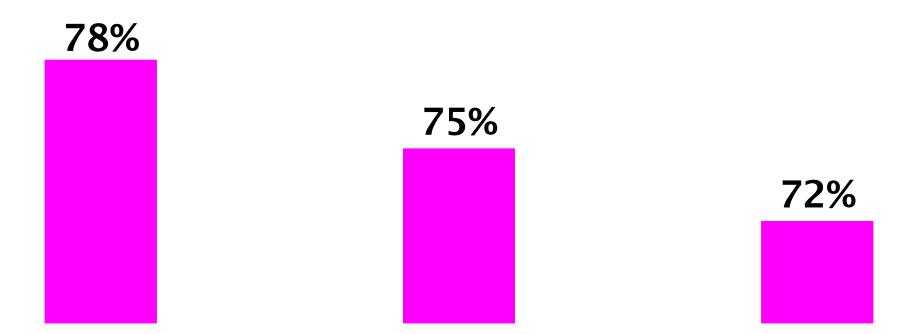
#### 2% of Alcohol-Related Harm in the Jiangshan Results from Underage Drinking



#### Optimistically, the Best Package of Underage Drinking Interventions Might Reduce the Problem by 25%; the Best School Program Is 8% Effective

- The goal in Jiangshan is a 10% reduction in harmful drinking
- At most, underage drinking prevention can achieve 5% of that goal, a school program 1.6% of that goal
- If you do anything in this area, I would recommend guarding against the problem worsening
  - Make it harder to buy underage
  - Sway parental attitudes
  - A school-based program is likely to increase problems by making kids curious or challenging them to show they can handle danger

#### Adult approval towards increasing:



police efforts to preventpolice efforts to ticketefforts by stores/bars toalcohol sales to underageadults who sell alcohol tocheck IDs to preventyouthunderage youthunderage sales

#### Adult approval towards increasing:



the minimum drinking age from 18 to 19 enforcement efforts targeting drivers who are drinking

#### Drink-Driving Intervention Effectiveness in the United States & Australia: These are additive

Intervention	Effect on DWI	Reduction in Harmful Drinking (Goal =10%)
Administrative License Revocation based on breath test	8%	1.2%
Impound vehicles of drinking drivers	4%	0.6%
Mandatory ignition interlock after first DWI offense	17% car, 0% M/C	1.5% ???
Scary crash media campaign	10%	1.5%

### **Reach Is Important**

- If you focus on an issue that is only 10% of the problem, a 10% reduction will only reduce harmful drinking by 1%
- It is hard to have much impact with individually focused, one-on-one interventions. If your intervention goes to 1% of city residents or students or drunk driving trips, even if it is perfectly effective, it can only reduce that aspect of harmful drinking by 1%
- Family-centered programs rarely have good reach

## Responsible Beverage Service: One Name, Many Dimensions; need most or all

Component	Effectiveness (Goal = 10%)
Dram shop liability law	6%
Mandatory server training	17%
Enforced law vs serving	11%
intoxicated patrons	
Mystery shop underage sales	0.5%
<b>Everything together</b>	25%

- The <u>Community Preventive Services Task Force</u> finds <u>insufficient</u> <u>evidence</u> to determine the effectiveness of responsible beverage service (RBS) training programs for reducing excessive alcohol consumption and related harms at the community level.
- Although reviewed studies generally showed positive results for the measured outcomes, these results primarily came from academic research studies that evaluated programs focused on individual establishments and were implemented under favorable conditions (e.g., intensive training programs, short follow-up times). Because of these limitations, further evidence is necessary to assess the public health impact of sustainable, community-wide RBS training programs.