Background


Coordinated by the WHO Secretariat in Geneva, the report presents an overview of global, regional, and country-level data relating to alcohol consumption and drinking patterns, health outcomes, and progress toward meeting the United Nations Sustainable Development target for reducing the harmful use of alcohol by 2030. As in past issues, the status report includes an Annex offering country-level data covering levels and patterns of alcohol consumption, health consequences (mortality and morbidity data), and policies and interventions currently in place. These data are also made available through the Global Information System on Alcohol and Health (GISAH). In addition, this issue of the GSRAH situates reducing harmful alcohol use, which is termed a “public health imperative”, in the context of the sustainable development agenda.

This issue of IARD Research Insights presents a summary of the key findings in the report, followed by in-depth analysis of its findings, methodological limitations, and other notable and relevant issues. It is organized according to the Report’s chapters for ease of reference.
Key findings and structure of this Research Insight

1. The report identifies positive trends in reducing alcohol-related harm and harmful drinking patterns, but there is scope for further improvement.

2. The WHO continues to focus unduly on reductions in per capita consumption (APC) as an unmet goal.

3. The WHO identifies a range of drivers of positive trends, recognizing the importance of ‘whole-of-society’ approaches.

4. The WHO continues to advocate for ‘best buy’ policies, despite many countries seeing progress without implementing them.

5. The WHO has changed their methodology for estimating consumption (APC), drinking patterns and health outcomes which has impacted trend estimates.

Table 1. Key global results

<table>
<thead>
<tr>
<th>Global estimate</th>
<th>2010</th>
<th>2016</th>
<th>% change</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol-related death rate (per 100,000)</td>
<td>44.6</td>
<td>38.8</td>
<td>-13%</td>
<td>Table 4.6</td>
</tr>
<tr>
<td>Alcohol-related disability-adjusted life year (DALY) rate (per 100,000)</td>
<td>1,968</td>
<td>1,759</td>
<td>-11%</td>
<td>Table 4.7</td>
</tr>
<tr>
<td>Heavy episodic drinking (% among all)</td>
<td>20.5</td>
<td>18.2</td>
<td>-11%</td>
<td>Table 3.5</td>
</tr>
<tr>
<td>Heavy episodic drinking (% among drinkers)</td>
<td>41.9</td>
<td>39.5</td>
<td>-6%</td>
<td>Table 3.5</td>
</tr>
<tr>
<td>Youth (15-19-year-old) heavy episodic drinking (% among all)</td>
<td>15.6</td>
<td>13.6</td>
<td>-13%</td>
<td>Table 3.6</td>
</tr>
<tr>
<td>Youth (15-19-year-old) heavy episodic drinking (% among drinkers)</td>
<td>47.5</td>
<td>45.7</td>
<td>-4%</td>
<td>Table 3.6</td>
</tr>
<tr>
<td>Total consumption per capita among population aged 15+ (liters/year)</td>
<td>6.4</td>
<td>6.4</td>
<td>0%</td>
<td>Table 6.1</td>
</tr>
</tbody>
</table>

The rest of this research insight will explore these findings in more detail.
1: The report identifies positive trends in reducing alcohol-related harm and harmful drinking patterns, but there is scope for further improvement

The report sets out notable positive trends for reducing the harmful use of alcohol in at least two of the Noncommunicable Disease Monitoring Framework (NCD framework) 2025 indicators\(^1\) of progress:

**Topline trends**

- **Alcohol-related harm:** The GSRAH 2016 report shows a global decline of 13% in the age-standardized alcohol-related death rate and a 10.6% decline in the age-standardized rate for alcohol-related Disability Adjusted Life Years (DALYs)\(^2\). The most positive trends are in Europe with 25% and 23% declines respectively.
- **Prevalence of Heavy Episodic Drinking (HED):** There has been consistent decline in HED in four out of six regions and a global decline of 11%, surpassing the target of a 10% reduction. NB: There have been changes to HED methodology – see section 5
- **Consumption:** Globally, alcohol per capita consumption (APC) remains stable since 2010 (6.4 liters pure ethanol).

**Detailed trends**

**Alcohol-related harm is decreasing:** While the estimated trends indicate good progress in reducing the harmful use of alcohol, the framing of the document emphasizes the burden of alcohol-related health outcomes. For instance, the report claims “Mortality resulting from alcohol consumption is higher than that caused by diseases such as tuberculosis, HIV/AIDS and diabetes.”

There are regional differences in reductions in alcohol-related deaths and DALYs:

- The most positive trends are in Europe with 25% and 23% declines respectively.
- Africa and the Western Pacific Region also saw double-digit decreases in alcohol-related deaths which fell 11.5% and 10.1% respectively.
- The South East Asian region was the only region which saw an increase; alcohol-related deaths rose 4.9% and DALYs 3.2%.

Of all deaths attributable to alcohol:

- 28% were due to injuries,
- 21% due to digestive disorders other than cancers and metabolic diseases,
- 19% due to cardiovascular diseases, and
- 13% due to cancers.

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\(^1\) See Table 2 below for details on the targets and indicators.

\(^2\) Disability Adjusted Life Years (DALYs): a measure best described as an estimate of healthy life years, factoring in both causes of death and disease. For more information see [http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/](http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/)
Prevalence of HED\(^3\) continues a downward trend: Using revised estimates published in the GSRAH 2018, HED prevalence among the total population aged 15 and above was 22.6% in 2000, 20.5% in 2010 and 18.2% in 2016.

- This represents a 24% decline in HED since 2000 and an 11% decline since 2010.
- Among drinkers only, HED declined from 44.4% in 2000 to 41.9% in 2010 and to 39.5% in 2016.
- This represents an 11% decrease since 2000 and a 6% decrease since 2010.
- HED prevalence varies widely by country
- At the regional level, the report draws attention to correlation between APC and HED prevalence, but this association is weak when looking at APC among drinkers only, or at the country level.

Alcohol Use Disorder (AUD) rates: the global prevalence is estimated at 5.1% or 283 million people aged 15 and above. Trends are not presented in the report.

Stable overall alcohol consumption: At the global level, per capita alcohol consumption (APC) was 6.4 liters of pure alcohol in 2016, the same level as in 2010.

- APC was stable in two regions: AFR and EMR
- APC decreased in two regions: AMR and EUR
- APC increased in two regions: SEAR and WPR; APC increased by 28.6% in South East Asia region (from 3.5 to 4.5 liters).

More abstainers/Fewer current drinkers: In 2010, 55% of the global population abstained from alcohol in the past 12 months and in 2016 57% were abstainers, an increase of 4.6%.

- Conversely, there are 4.6% fewer current drinkers in 2016 compared with 2010.

Increasing consumption among current drinkers: APC among drinkers increased from 14 liters in 2010 to 15.1 liters in 2016, a nearly 8% increase.

- The report indicates increases in APC among drinkers in all regions except the European region.
- This change could be due in part to the estimated decrease in current drinkers, even if per capita consumption levels remained stable.

Continued gender differences: There continue to be fewer women than men drinkers in all regions of the world; globally, 32% of women and 54% of men were current drinkers in 2016.

- Following overall trends in declining rates of current drinkers, the prevalence of women drinkers has decreased in most regions and globally.
- When women do drink, they drink less and engage in HED less often than men:
  - Total APC among drinkers was 19 liters for men and 7 liters for women in 2016;

\(^3\) HED is defined as drinking 60 or more grams of pure alcohol on at least one occasion in the past 30 days in the Annex, but referred to as “at least monthly” text of the report
Prevalence of HED among drinkers was 50% for men and 20% for women in 2016.

Current drinking among adolescents (ages 15-19) varies widely:
- Globally, the prevalence of current drinkers among adolescents was 26.5% in 2016.
- Rates were highest in Europe and the Americas and lowest in the Eastern Mediterranean and the South East Asia regions, and range from 1.2% to 74%.
- The current report does not include estimates of current drinking among adolescents in 2010. The GSRAH 2014 report stated that 34% of adolescents were current drinkers, however, it is unclear whether or not earlier estimates are comparable with those in the 2018 report.

Positive trends in HED among adolescents: Prevalence of HED among all 15-19 year olds continued a downward trend across all regions, declining globally by 26% since 2000 and 13% since 2010. However, HED remains high among adolescent drinkers at 46% in 2016.
- Trends among adolescents mirror those among 20-24 year olds, the age group with the highest HED prevalence, and in the general 15+ population.
- Not only has the prevalence of HED among the 15-19 population decreased by 13% globally from 2010 to 2016, even among those 15-19 year-olds who do drink, there has been a reduction of 4% in HED.

Unrecorded alcohol consumption remained stable: globally, it was estimated to make up 24.8% of total consumption in the 2014 report and 25.5% in the 2018 report.
- The proportion is higher in regions where the sale of alcohol is prohibited by several countries at the national or subnational level; the proportion of consumption that is from unrecorded alcohol was 45% in Southeast Asia and 71% in the Eastern Mediterranean.
- Low-income and lower-middle-income countries also have a higher proportion of unrecorded to total alcohol consumption. For these countries, 40% of all alcohol consumed is unrecorded alcohol.

Total consumption (APC) and unrecorded alcohol consumption are projected to increase by 2025:
- Current drinking rates are expected to continue a downward trend with a decline in the global rate of 6.3% between 2016 and 2025.
- APC is expected to increase from 6.4 to 7.0 liters of pure alcohol between 2016 and 2025.
  - Smaller declines in current drinkers and larger increases in APC are expected in the South East Asia and Western Pacific regions. Several populous countries in these two regions are projected to have the greatest increases in APC, most notably India, China, Indonesia, Thailand, and Vietnam.
  - In contrast, some high-income countries in these regions (Australia, Japan) are projected to have decreases in consumption.
Unrecorded alcohol consumption is projected to increase from 25.5% to 27.7% by 2020, or by 8.6% in four years.

- Increases are expected in low-income and lower-middle-income countries but the share of consumption that is unrecorded alcohol is predicted to be stable in upper-middle-and high-income countries.

2: The WHO continues to focus unduly on reducing per capita consumption as an unmet goal

Table 2. Major global alcohol targets set by multilateral agencies

<table>
<thead>
<tr>
<th>Global strategy</th>
<th>Target</th>
<th>Indicators</th>
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<tbody>
<tr>
<td><strong>UN Sustainable Development Goals (SDGs)</strong>&lt;br&gt;Timeline: 2016-2030</td>
<td>Target 3.5: Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.</td>
<td>3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders; 3.5.2 Harmful use of alcohol, defined according to the national context as APC (aged 15 years and older) within a calendar year in liters of pure alcohol.</td>
</tr>
<tr>
<td><strong>WHO NCD Global Monitoring Framework</strong>&lt;br&gt;Timeline: 2012-2025</td>
<td>Target 2: At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context.</td>
<td>a. Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context &lt;br&gt;b. Age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate, within the national context &lt;br&gt;c. Alcohol-related morbidity and mortality among adolescents and adults, as appropriate, within the national context</td>
</tr>
</tbody>
</table>

The United Nations Sustainable Development Goals (SDG) target 3.5 addresses “harmful use of alcohol” but it is intended to be assessed by tracking two indicators: annual per capita consumption among adults and treatment coverage for alcohol use disorders.

- Unlike the target for the NCD framework for 2025, no specific quantifiable change in either of these indicators has been agreed at the global level within the SDG agenda. Instead, governments are encouraged to set such targets as are appropriate to their national context.
- With regard to treatment coverage for alcohol use disorders, the GSRAH 2018 gives insufficient attention to the finding that “the level of treatment coverage in most countries is not known,” which means that a baseline for this SDG indicator cannot be established.
  - Treatment coverage of above 39% of dependent persons was considered “high” but was reported by only 23 countries (10 of these being in the European region).
  - For 27% of countries, the reported treatment coverage was very limited to none.
Although the report incorporates findings on all three indicators agreed upon in the NCD Framework, it emphasizes alcohol per capita consumption (APC) as the most important indicator, which is also reflected in a recently released WHO collection of NCD-focused country profiles.

- Although globally alcohol per capita consumption (APC) has remained stable since 2010 at 6.4 liters, in Europe it has decreased by more than 10% since 2010 (surpassing the global voluntary target).

For more information on targets and indicators see IARD’s website.

3. The WHO identifies a range of drivers of positive trends, recognizing the importance of ‘whole-of-society’ approaches

The report notes a range of different factors that it argues are driving the trends in HED and alcohol-related harm.

- The report acknowledges that “factors which reach beyond specific policies or cultures must be in play” in the declines observed in youth drinking. This is due to the fact that large decreases have been seen in many high-income countries, despite differing policies and cultures.
- The report also notes that “increased health consciousness in populations” was potentially a factor in declining youth drinking.
- It also recognizes that “addressing the harmful use of alcohol requires “whole of government” and “whole of society” approaches, with appropriate engagement of non-state actors, and particularly of public health-oriented NGOs, professional associations and civil society groups.”
- However, the role of the alcohol beverage industry is narrowly conceived: “The main areas for the dialogue include self-regulation of marketing within coregulatory frameworks, labelling and consumer information, alcohol content in alcoholic beverages as well as provision of data useful for improving estimates of alcohol consumption in populations. In this context it has to be underlined that regulatory controls on the market must be decided and enforced by governments, with public health interests as the primary goals. Such regulations and their enforcement need to be protected from industry interference.” [emphasis added]
- The report notes the importance of economic development to alcohol consumption and harm rates but highlights an inconsistency. Despite noting that “As societies become more affluent, there is a strong tendency for the level of alcohol consumption to increase”, it also notes that “the alcohol-attributable disease burden was highest in low-income and lower middle-income countries when compared to upper-middle-income and high-income countries.”

4. The WHO continues to advocate for ‘best buy’ policies, despite many countries seeing progress without implementing them

The policies and interventions section of the report presents the status of 23 alcohol policy indicators as reported by WHO national contact points in the Global Survey on Alcohol and Health. In 2016, 173 countries responded to this survey, with varying response rates for individual questions. These data are also made in the GSRAH 2018 country profiles, and are available from the Global Information System on Alcohol and Health (GISAH).

There are some issues with the accuracy of WHO’s policy data:

- The report’s Data Sources and Methods Appendix advises caution when interpreting the results of this survey and states that “the data on alcohol policy have not been checked against the actual policy legislation in the countries concerned”.
- IARD has identified some inaccuracies in the reported policy information.

As in earlier editions of the GSRAH, the 2018 report continues to recommend the widespread adoption of a subset of favored policies deemed cost-effective (taxation, availability restrictions, a ban on marketing) by application of the WHO-CHOICE method, despite the report also finding that considerable progress has occurred in reducing harmful drinking and related outcomes in a global context where only a minority of countries have implemented these “best buys”, and with varying levels of enforcement.

The “one size fits all” approach fails to recognize that “best buys” may work best in high-income countries that have more resources and capacity. Several of the most commonly implemented approaches have not been evaluated through the WHO-CHOICE method but may be more feasible for less-resourced countries, namely:

- creating and enforcing minimum legal purchase age limits,
- responsible service training,
- implementing a national licensing system and addressing informal and illicit alcohol through legislation and licensing, and
- creating national policy documents that address harmful drinking.

The WHO’s so-called “best buys” for reducing harmful use of alcohol (i.e. regulating availability, restricting or banning advertising and promotions, and pricing policies such as taxation) were found to be more cost-effective than enforcement of blood alcohol concentration limits through sobriety checkpoints and providing psychosocial counseling to hazardous and harmful drinkers. Further analysis can be made available upon request.
Detailed findings of the GSRAH 2018 on the implementation status of alcohol policy measures include the following:

- **95% of responding countries reported having alcohol excise taxes.** There was no change in the number of countries reporting excise taxes on alcohol from 2008.
  - The countries reporting no excise also tend to report implementing few other measures (e.g., Antigua and Barbuda, Equatorial Guinea, Lesotho, Mali, Monaco, and South Sudan).
- **155 countries (89%) reported having drink driving legislation,** while 20 reported no legislation and 29 reported having “zero tolerance” policies.
  - The most common maximum permissible blood-alcohol concentration (BAC) levels for drivers were 0.5 mg/mL and 0.8 mg/mL.
- **46% of responding countries reported having written national alcohol policies,** and a majority of the remaining countries (55%) reported being in the process of developing one.
  - The share with written policies increased by 28% compared to 2008.
  - 70% of the 80 countries with written national policies have a national policy that addresses illicit/informal production of beer and wine and 84% address illicit/informal production of spirits.
- **Most countries (86%) reported nationwide activities aimed at raising awareness of alcohol-related harms.**
  - In 30% of cases these were carried out with funding including industry sources, while a majority (77%) were supported with funding from NGO sources.
  - Drink-driving (93%) and youth (79%) were the most common topics among both NGO- and industry-funded awareness-raising activities.
- **Responsible beverage service training (RBS) was reported in over 75% of countries,** triple the figure from 2010.
  - RBS is more common in low-income (88%), lower-middle income (90%), and middle-income countries (84%) than in high-income countries (53%).
- **104 countries reported having a standard definition of an alcohol beverage;** 86% defined alcohol beverages by the percentage of alcohol by volume.
- Nearly one-third of reporting countries reported placing regulations on alcohol outlet density and days when alcohol may be sold.

The following findings indicate that there is room for improvement in the implementation of key policies recommended in the Global Alcohol Strategy 2010:

- **40% of countries reported that treatment coverage for alcohol-dependent persons was unknown,** and **27% of countries reported very limited or close to no treatment coverage for alcohol-dependent persons.**
  - Treatment coverage of dependent persons above 39% was considered “high” but was reported by only 23 countries (10 of these being in the Europe region).
52% of countries reported having increased screening and brief intervention coverage in primary care.

31 responding countries reported having no BAC limits.

11 countries reported no on-premise minimum purchase age limits for beer and wine sales/consumption and 12 for spirits. These were mostly low-income or lower-middle income countries, and seven of them were located in the WHO African region.

- For three of the countries that are listed as not having any minimum legal purchase age limits (Benin, China, and Vanuatu), verified records in IARD’s Regulatory Database indicate that this policy is actually in place.
- Analysis in the report states that “While most countries have established a minimum age for purchase of alcohol, only about three-quarters of the population...were covered by these policies.” This assessment is driven by the inclusion of China, which contributes about a fifth of the world’s population, in the list. David Jernigan and Pamela Trangenstein are listed as key contributors to this chapter of the report.

While most countries reported some restriction on all media types, the majority had no alcohol marketing restrictions in 2016 on the Internet (52%) and social media (53%), which may indicate that regulation has not kept pace with technological innovation.

- 35 of the 123 responding countries reported no marketing restrictions of any kind.
- However, verified records in IARD’s Regulatory Database indicate that regulations and advertising self-regulation standards are actually in place in 11 of these countries; some of these were established since 2016, after the WHO survey policies was conducted.

Only two thirds (109 countries) reported implementing at least one national survey on alcohol consumption since 2012.

- In 84 countries these surveys covered both adult and youth consumption, in 25 countries only adult consumption, and in 17 countries only youth consumption.
- Only 82 countries reported having a national alcohol monitoring system, most commonly collecting data on alcohol consumption and/or related health consequences.

5. The WHO has changed their methodology for estimating consumption (APC), drinking patterns, and health outcomes which has impacted trend estimates

In addition to a greater number of national surveys from recent years which were used to estimate the prevalence of current drinkers, former drinkers, and abstainers, a number of methodological changes in the GSRAH 2018 require re-estimation for prior years in order to derive trends.

Total alcohol consumption per capita is adjusted for tourist consumption in all member states in GSRAH 2018 report. In GSRAH 2014, total APC was adjusted for only 29 countries.
• **The tourism adjustment has a net global effect of zero.** In other words, it merely shifts consumption from one country to another based on tourist flows, rather than adding to the estimated total amount of alcohol consumed.

• **It assumes that people consume equivalent amounts of alcohol while traveling as when they are in their home country** and is calculated like this:
  - For country A, total APC is decreased by the number of tourists visiting it, multiplied by their average length of stay, multiplied by a tourist’s home country average consumption of alcohol in grams/day.
  - For the same country A, total APC is increased by the number of its inhabitants who visit other countries, multiplied by their average length of stay outside of Country A, multiplied by Country A’s average consumption of alcohol in grams/day.

• Countries with the largest adjustments (in liters per capita) were: Bahamas (-5.4), Estonia (-5.3), Antigua and Barbuda (-2.6), Croatia (-2.4), Seychelles (-1.8), and Santa Lucia (-1.3); see Table IV.6 or access country data on GISAH.

**HED prevalence in 2000, 2005 and 2010 has been re-estimated following the new methodology used for 2016.** New estimates at the country level have so far only been made available in GISAH for 2016, but not for prior years.

- The new HED figures show a consistent downward trend across all regions from 2000 through 2016, and globally HED has decreased by 11% since 2000 for the total 15+ population.
- **The changes to the HED estimation methodology are not fully disclosed in the report** or the Data Sources and Methods Appendix. **IARD is seeking clarification on this matter from the WHO and will update accordingly.**
- It is possible that changes to the methods of estimating APC and prevalence of abstainers have also influenced the shift in HED prevalence estimates.
- It is possible that the definition of HED has changed slightly.

**Prevalence of alcohol use disorders** was derived from national surveys where available and otherwise “the AUD estimates were carried forward from the Global Status Report on Alcohol and Health 2014”.

- Estimates have only been made available in GISAH for 2016, without indication for each country on whether these are based on new information.