Goal 3: Ensure healthy lives and promote well-being for all at all ages

Target 3.5: Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol

Indicator 3.5.2: Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol

Institutional information

Organization(s):

World Health Organization (WHO)

Concepts and definitions

Definition:

Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol

Total alcohol per capita consumption (APC) is defined as the total (sum of recorded APC three-year average and unrecorded APC) amount of alcohol consumed per adult (15+ years) over a calendar year, in litres of pure alcohol.

Recorded alcohol consumption refers to official statistics at country level (production, import, export, and sales or taxation data), while the unrecorded alcohol consumption refers to alcohol which is not taxed and is outside the usual system of governmental control, such as home or informally produced alcohol (legal or illegal), smuggled alcohol, surrogate alcohol (which is alcohol not intended for human consumption), or alcohol obtained through cross-border shopping (which is recorded in a different jurisdiction).

In circumstances in which the number of tourists per year is at least the number of inhabitants, the tourist consumption is also taken into account and is deducted from the country's recorded APC. The data on the number of tourists is from UN Tourist Statistics.

Rationale:

Alcohol consumption can have an impact not only on the incidence of diseases, injuries and other health conditions, but also on the course of disorders and their outcomes in individuals. Alcohol consumption has been identified as a component cause for more than 200 diseases, injuries and other health conditions. Per capita alcohol consumption is widely accepted as the best possible indicator of alcohol exposure in populations and the key indicator for estimation of alcohol-attributable disease burden and alcohol-attributable deaths. Its correct interpretation requires the use of additional population-based indicators such as prevalence of drinking, and, as a result, stimulates development of national monitoring systems on alcohol and health involving contributions from a wide range of stakeholders, including alcohol production and trade sectors.

Concepts:

Recorded alcohol per capita (15+) consumption of pure alcohol is calculated as the sum of beveragespecific alcohol consumption of pure alcohol (beer, wine, spirits, other) from different sources. The first priority in the decision tree is given to government national statistics; second are country-specific alcohol industry statistics in the public domain based on interviews or fieldwork (Canadean, International Wine and Spirit Research (IWSR), Wine Institute; historically World Drink Trends) or data from the International Organisation of Vine and Wine (OIV); third is the Food and Agriculture Organization of the United Nations' statistical database (FAOSTAT), and fourth is data from alcohol industry statistics in the public domain based on desk review. For countries, where the data source is FAOSTAT the unrecorded consumption may be included in the recorded consumption. As from the introduction of the "Other" beverage-specific category, beer includes malt beers, wine includes wine made from grapes, spirits include all distilled beverages, and other includes one or several other alcoholic beverages, such as fermented beverages made from sorghum, maize, millet, rice, or cider, fruit wine, fortified wine, etc. For unrecorded APC, the first priority in the decision tree is given to nationally representative empirical data; these are often general population surveys in countries where alcohol is legal. Second are specific other empirical investigations, and third is expert opinion supported by periodic survey of experts at country level (50 countries with significant estimates of unrecorded alcohol consumption) using modified Delphitechnique.

For recorded APC, in order to make the conversion into litres of pure alcohol, the alcohol content (% alcohol by volume) is considered to be as follows: Beer (barley beer 5%), Wine (grape wine 12%; must of grape 9%, vermouth 16%), Spirits (distilled spirits 40%; spirit-like 30%), and Other (sorghum, millet, maize beers 5%; cider 5%; fortified wine 17% and 18%; fermented wheat and fermented rice 9%; other fermented beverages 9%). Survey questions on consumption of unrecorded alcohol are converted into estimates per year of unrecorded APC. In some countries, unrecorded is estimated based on confiscated alcohol confiscated by customs or police.

Comments and limitations:

The indicator is feasible and suitable for monitoring purposes as evidenced by availability of data from 190 countries and inclusion of this indicator in global, regional and national monitoring frameworks. This is the key indicator for alcohol exposure in populations. The data available (based on production, import, export, and sales or taxation) do not enable the disaggregation of alcohol per capita consumption (APC) by sex or age; to this end, other data sources, such as survey data, are needed. The estimation of unrecorded APC remains a challenge, and triangulation of data from different sources as well as Delphitechniques are used for increasing validity of estimates. In recent time the number of research activities focused on improvement of the estimates of unrecorded alcohol consumption as well as their geographical coverage have increased substantially. As a result, it leads to a more accurate assessment of the total amount of alcohol consumed per person per year in a given country.

Methodology

Computation Method:

Numerator: The sum of the amount of recorded alcohol consumed per capita (15+ years), average during three calendar years, in litres of pure alcohol, and the amount of unrecorded alcohol per capita consumption (15+ years), during a calendar year, in litres of pure alcohol.

Denominator: Midyear resident population (15+ years) for the same calendar year, UN World Population Prospects, medium variant.

Disaggregation:

Sex, age.

Treatment of missing values:

At country level

The values of missing countries (e.g. Monaco, San Marino) are that small that they would not affect global or regional figures.

At regional and global levels

The values of missing countries (e.g. Monaco, San Marino) are that small that they would not affect global or regional figures.

Regional aggregates:

Regional and global aggregates are population weighted averages from country values (weighted by population of inhabitants 15+ years of the respective countries).

Sources of discrepancies:

Population estimates, alcohol content by volume across different alcoholic beverage categories, age distributions, requirements for survey data used in producing the estimates, estimates of unrecorded alcohol consumption.

Data Sources

Description:

Recorded: Government statistics or, alternatively, alcohol industry statistics in the public domain, FAOSTAT;

Unrecorded: Nationally representative empirical data or, alternatively, specific empirical investigations, expert opinion.

Collection process:

The Global Survey on Alcohol and Health is conducted periodically (next one in 2016) in collaboration with all six WHO regional offices. National counterparts or focal points in all WHO Member States are officially nominated by the respective ministries of health. They are provided with the online survey data collection tool for completion. Where this is not feasible, a hard copy of the tool is forwarded directly to those who requested it. The survey submissions are checked and whenever information is incomplete or in need of clarification, the questionnaire is returned to the focal point or national counterpart in the country concerned for revision. Amendments to the survey responses are resubmitted by e-mail or electronically. Data submitted from countries is triangulated with data from key industry-supported data providers at annual meetings organized by WHO with an objective to identify discrepancies and solutions. Estimates for key indicators are compiled into country profiles which are sent to the focal point or national counterpart in the country for validation and endorsement.

Data Availability

Description:

Global, by WHO regions, by World Bank income groups, by country. The data are available for 190 WHO Member States.

Time series:

Recorded alcohol per capita consumption since 1960s, and total alcohol per capita consumption since 2005, with estimates for unrecorded alcohol consumption for 2005, 2010 and 2015.

Calendar

Data collection:

Passive surveillance ongoing. The next WHO global surveys on alcohol and health involving data collection from WHO Member States in 2016 and 2019.

Data release:

2016 and 2018

Data providers

Ministries of Health; National statistical bureau/agencies (data on alcohol production and trade/sales); National monitoring centres on alcohol and drug use; National academic and monitoring centres concerned with population-based surveys of risk factors to health.

Data compilers

World Health Organization (WHO)

References

URL:

http://apps.who.int/gho/data/?showonly=GISAH&theme=main

References:

http://apps.who.int/gho/data/?showonly=GISAH&theme=main

http://www.who.int/gho/alcohol/en/

http://www.who.int/substance_abuse/publications/global_alcohol_report/en/

Related indicators

Goal 8; Targets 3.4, 3.6