

# Global burden of cancer in 2020 attributable to alcohol consumption: a population-based study

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**Background:** Alcohol use is causally linked to multiple cancer sites. We present global, regional and national estimates of alcohol-attributable cancer burden in 2020 to inform alcohol policy and cancer control across different settings globally.

**Methods:** In this population-based study, we calculated population attributable fractions (PAFs) using relative risk estimates and alcohol use prevalence by age, sex, and country. Assuming a 10-year latency period between alcohol consumption and cancer occurrence, we used alcohol consumption prevalence from 2010 and GLOBOCAN 2020 data to estimate new cancer cases attributable to alcohol consumption. We also calculated the contribution of moderate (<20 g alcohol per day), risky (20 to 60 g per day), and heavy (>60 g per day) drinking to the total alcohol-attributable cancer burden.

**Results:** Globally, an estimated 725 000, or 4.0%, of all new cases of cancer in 2020 were attributable to alcohol consumption. Males represented 76% of the total alcohol-attributable cancer cases. The cancer sites which contributed the most alcohol-attributable cases were cancers of the oesophagus (190 000 cases), liver (155 000 cases), and breast (98 300 cases). PAFs were lowest in Northern Africa and Western Asia (less than 1%) in both sexes, and highest in Eastern Asia (8.5%) and Central and Eastern Europe (7.3%) in men, and in Central and Eastern Europe (3.4%), Western Europe (3.2%), and Australia and New Zealand (3.2%) in women. Risky and heavy drinking contributed most to the burden of alcohol-attributable cancers (39.5% and 46.5%, respectively), and moderate drinking contributed 14.0%.

**Conclusion:** Our findings highlight the need for effective policy and interventions to increase awareness of cancer risks associated with alcohol use and decrease overall alcohol consumption to avoid future rises in alcohol-attributable cancer burden in several regions of the world.

**Primary authors:** RUMGAY, Harriet (International Agency for Research on Cancer); Dr SHIELD, Kevin (Centre for Addiction and Mental Health); Dr CHARVAT, Hadrien (International Agency for Research on Cancer); FERRARI, Pietro (IARC); Dr SORNPAISARN, Bundit (Centre for Addiction and Mental Health); Dr OBOT, Isidore (Centre for Research and Information on Substance Abuse); Dr ISLAMI, Farhad (American Cancer Society); Dr LEMMENS, Valery (Netherlands Comprehensive Cancer Organization); Dr REHM, Jürgen (Centre for Addiction and Mental Health); SOERJOMATARAM, Isabelle (IARC)

**Presenter:** RUMGAY, Harriet (International Agency for Research on Cancer)

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