New review concludes that evidence for alcohol causing cancer is strong

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A new review of epidemiological evidence supports a causal association between alcohol consumption and cancers at seven sites in the body: oropharynx, larynx, oesophagus, liver, colon, rectum and female breast.

This is a stronger statement than the long-recognised association between alcohol and cancer. An association means there is a relationship of some kind between the two variables. A causal association means there is evidence that alcohol consumption directly causes cancer.

The causal link was supported by evidence for a dose-response relationship, at least partial reversal of risk when alcohol consumption is reduced, statistical adjustment for other factors that might explain the association, and specificity of the association with some cancers and not others.

The epidemiological evidence for these conclusions comes from comprehensive reviews undertaken in the last 10 years by the World Cancer Research Fund and American Institute for Cancer Research, the International Agency for Research on Cancer, the Global Burden of Disease Alcohol Group, and the most recent comprehensive meta-analysis undertaken by Bagnardi and colleagues*, building on meta-analyses of the effect of alcohol on single cancers.

The review cites evidence that alcohol caused approximately half a million deaths from cancer in 2012, 5.8% of cancer deaths worldwide. The highest risks are associated with the heaviest drinking, but a considerable burden is experienced by drinkers with low to moderate consumption.

The review also finds the current evidence that moderate drinking provides protection against cardiovascular disease is not strong.

The review is published online today by the scientific journal *Addiction*.

More information: Connor J (2016) Alcohol consumption as a cause of cancer. *Addiction* 111: DOI: 10.1111/add.13477

*Bagnardi V, Rota M, Botteri E, Tramacere I, Islami F, Fedirko V, et al. Alcohol consumption and site-specific cancer risk: a comprehensive dose-response meta-analysis. *Br J Cancer*. 2015;112(3):580-93.