



Factsheet



Introduction



Around 4% of cancers in the UK are directly attributable to alcohol – around 12,800 individual cases every year.¹ This makes alcohol one of the most preventable causes of cancer after smoking.² Worldwide, one in five of alcohol-related deaths are caused by cancer.³ Just one alcoholic drink a day can increase the risk of developing cancer⁴ – and the risk increases with every drink.⁵

However, public awareness of the cancer risks associated with drinking is low. More than nine in ten of the British public are aware excessive alcohol is bad for health, yet less than half are aware of the link between alcohol and cancer and only a third are aware of the specific relationship between alcohol and breast cancer, for example.⁶ This lack of knowledge constitutes a significant public health risk.



Worldwide, one in five of alcohol-related deaths are caused by cancer.

Alcohol consumption increases the risk of developing cancer

Over one hundred and fifty studies worldwide confirm that alcohol is a carcinogen – meaning it is a particular risk factor in the development of cancer. Seven different types of cancer are directly attributable to alcohol.⁷

Type of Cancer	Percentage of diagnosed cancer cases in the UK in 2010 attributable to alcohol	Number of diagnosed cancer cases in the UK in 2010 attributable to alcohol
Mouth and throat	30.4%	2,106
Voice Box	24.6%	539
Oesophagus	20.6%	1,761
Liver	9.1%	324
Colorectal	11.6%	4,649
Breast	6.4%	3,080

Source: DM Parkin, "Cancers attributable to consumption of alcohol in the UK in 2010", *British Journal of Cancer*, (2011), Vol 105, pp. S14 – S18

No Safe Level of Alcohol

There is no 'safe' level of alcohol consumption when seeking to reduce the risks of alcohol-related cancers. The more alcohol consumed the greater the risk. Light daily alcohol consumption can increase the cancer risk for parts of the body which come into direct contact with alcohol

– the mouth, throat, larynx and oesophagus - and breast cancer.⁴ Heavy consumption increases the risk of all seven types of alcohol-related cancer. Consuming three units of alcohol a day increases the risk of developing liver cancer by nearly 20%; six units a day increases the risk by 40%; and 12 units per day increases risk by 80%.⁵

Alcohol and Cancer



Does the type of alcohol matter?

The type of alcohol consumed has no effect on the risk of developing cancer.^{8,9} What is important is the amount consumed. The greater the strength and number of drinks consumed, the greater the risk of developing cancer.

How does alcohol cause cancer?

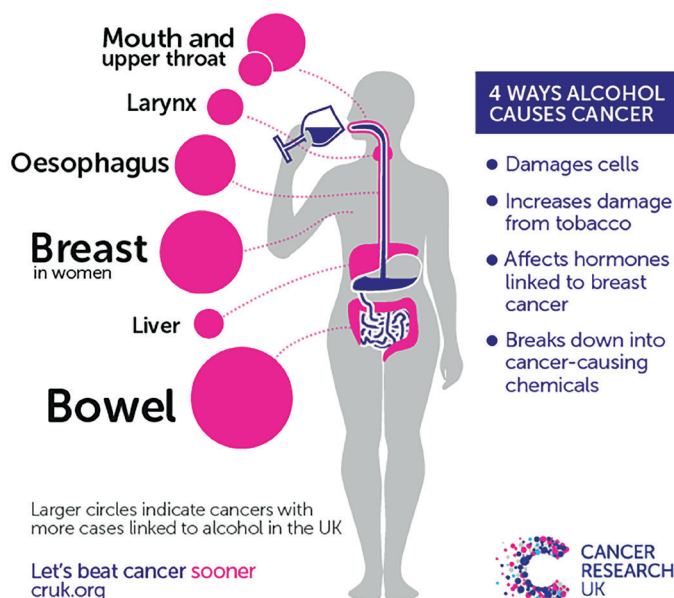
The exact causal mechanism between alcohol and cancer is not fully known and it is likely that it varies between the different types of cancer. However, one common mechanism that is likely shared is how alcohol breaks down into the carcinogenic compound 'acetaldehyde' inside the body. This substance causes genetic mutations and permanently damages DNA, which can lead to the development of cancerous cells.¹⁰

Conclusion

Alcohol is one of the most preventable causes of cancer. Yet, public knowledge levels about the relationship between alcohol and cancer is relatively low. The risk increases with each drink so there is no 'safe' level of alcohol consumption when seeking to reduce the risks of certain cancers.

ALCOHOL CAN CAUSE 7 TYPES OF CANCER

Drinking less alcohol could **prevent 12,800 cancer cases** per year in the UK.



Infographic courtesy of Cancer Research UK

References

¹ Calculated by the Cancer Research UK Statistical Information Team, based on figures from Parkin DM, Boyd L, Darby SC, Mesher D, Sasieni P, Walker LC. The Fraction of Cancer Attributable to Lifestyle and Environmental Factors in the UK in 2010. *Br J Cancer* 2011; 105, (S2):Si-S81

² Cancer Research UK, "Statistics on preventable cancers", (September 2014), <<http://www.cancerresearchuk.org/cancer-info/cancerstats/causes/preventable/#Alcohol>>, [accessed 20/4/15]

³ J Rehm *et al*, "Alcohol Use", *Comparative quantification of health risks*, (2004), <http://www.who.int/healthinfo/global_burden_disease/cra/en/>, [accessed 21/4/15]

⁴ V Bagnardi *et al*, "Light alcohol drinking and cancer: a meta-analysis", *Annals of Oncology*, (2013), Vol 24, pp. 301 - 308

⁵ G Corrao *et al*, "A meta-analysis of alcohol consumption and the risk of 15 diseases", *Preventive Medicine*, (2004), Vol 38, pp. 613 - 619

⁶ Alcohol Health Alliance, "Public call for health warnings on alcohol labels", (January 2015), <<http://ahauk.org/public-call-for-health-warnings-on-alcohol-labels/>>, [accessed 14/4/15]

⁷ DM Parkin, "Cancers attributable to consumption of alcohol in the UK in 2010", *British Journal of Cancer*, (2011), Vol 105, pp. S14 - S18

⁸ N Allen *et al*, "Moderate alcohol intake and cancer incidence in women", *Journal of the National Cancer Institute*, (2009), Vol 101 No 6, pp. 296 - 305

⁹ WJ Blot, "Alcohol and cancer", *Cancer Research*, (April 1992), Vol 52 No 7, pp. 2119s - 2123s

¹⁰ Dr P. Boffetta & M. Hashibe, "Alcohol and cancer", *The Lancet Oncology*, (2006) Vol 7 (2) Pg 149-156

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