

# Alcohol and Cancer

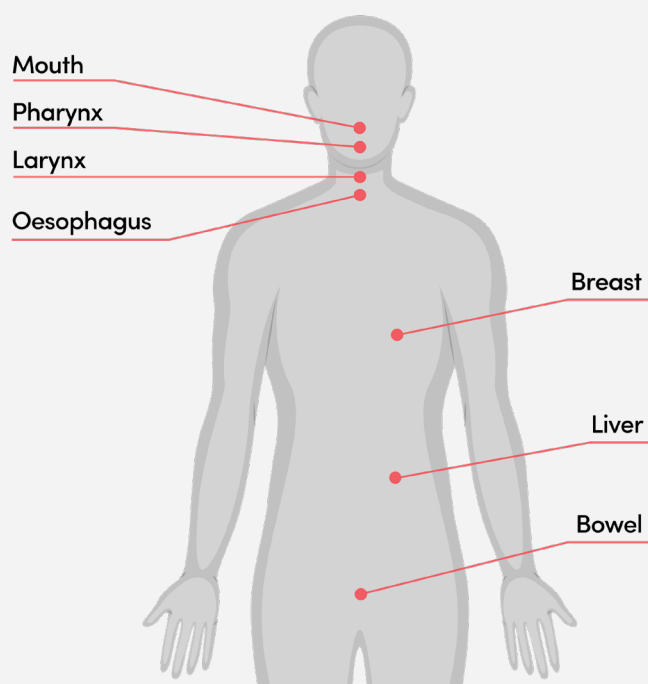
fare

## What is the link between alcohol and cancer?

Alcohol is a Group 1 carcinogen.<sup>1</sup> This means that the World Health Organization's (WHO) International Agency for Research on Cancer has confirmed that alcohol causes cancer.

Drinking alcohol is known to cause cancers of the mouth, throat (pharynx and larynx), oesophagus, liver, breast and bowel.<sup>2</sup>

### SITES OF ALCOHOL-RELATED CANCER



## Does any alcohol increase my risk of cancer?

There is no safe level of drinking alcohol when it comes to cancer – even drinking at low levels increases your risk. But the more alcohol you drink over time, the higher your risk of cancer.<sup>3</sup>

All types of alcohol, including beer, wine, and spirits, increase cancer risk.<sup>4</sup>

Your risk of cancer from drinking alcohol is significantly higher if you also smoke.<sup>5</sup>

## How many people get cancer from drinking alcohol?

Alcohol was estimated to cause around 5,800 Australians to develop cancer in 2020 (more than 4 per cent of new Australian cancer cases), and more than 741,000 people to develop cancer worldwide.<sup>6</sup>

Each year, alcohol is estimated to be responsible for around 2,100 Australian deaths from cancer,<sup>7</sup> and about 480,000 cancer deaths globally.<sup>8</sup>

## How does alcohol cause cancer?

Alcohol may cause cancer in different ways:<sup>9,10</sup>

When the body breaks down the pure alcohol (ethanol) in alcoholic drinks, it becomes a toxic chemical called acetaldehyde. This can damage your DNA, causing abnormal cell growth.

Alcohol may lead to cells absorbing higher levels of other carcinogenic (cancer causing) substances, such as tobacco.

Alcohol may interfere with the ability of the body to repair DNA and prevent cancer.

Drinking at high levels can lead to you not having enough essential nutrients, such as folate, which may make tissues in your body more vulnerable to developing cancer.

Alcohol can influence levels of oestrogen and other hormones in the body, increasing the risk of breast cancer.

In addition, alcohol is very high in energy and can contribute to weight gain. Being overweight or obese is also a cause of many different types of cancer.<sup>11</sup>

### Need advice or support?

To find a local GP, you can call **1800 022 222** or visit [healthdirect.gov.au](http://healthdirect.gov.au).

If you need other support to reduce your drinking, you can contact the National Alcohol and Other Drug Hotline on **1800 250 015**.

## How can I reduce my risk of cancer from alcohol?

When it comes to cancer, there is no safe level of drinking alcohol. But you can reduce your risk of cancer by reducing the amount you drink.

The [Australian Alcohol Guidelines](#) recommend having no more than 10 standard alcoholic drinks in a week to reduce your risk of cancer and other diseases, and no more than 4 standard drinks on any one day to reduce your risk of injuries or accidents.

The less you drink, the lower your risk of cancer, other diseases and injury.

## What is a standard drink?

Being aware of the number of standard drinks in a serve of alcohol can help you keep track of how much you are drinking. This depends on the alcohol volume (strength) and the size of the serve. A standard drink in Australia equates to 10 grams of pure alcohol.

One small glass (285ml middy or pot) of full-strength beer contains 1.1 standard drinks.

An average sized glass of wine in a restaurant (150ml)

contains about 1.6 standard drinks for white wine, and 1.8 standard drinks for red wine.

One nip of spirits (30ml) contains 1 standard drink.

Every alcohol product in Australia is required to be labelled with the number of standard drinks that it contains. For more information on standard drinks see FARE's information sheet *Keeping track of standard drinks* or visit [fare.org.au/resources](http://fare.org.au/resources).

## Where can I find help to reduce my drinking?

You don't have to make changes alone. If you need help cutting back on alcohol to reduce your risk, you can speak to a doctor.

You can find a local GP at [www.healthdirect.gov.au](http://www.healthdirect.gov.au) or you can call 1800 022 222.

If you need other support to reduce your drinking, you can contact the National Alcohol and Other Drug Hotline on 1800 250 015.

For more support services, see FARE's information sheet *Alcohol support services* or visit [fare.org.au/support](http://fare.org.au/support).

---

## References

- 1 International Agency for Research on Cancer. IARC monographs on the evaluation of carcinogenic risks to humans, volume 100E. Consumption of Alcoholic Beverages. Lyon, France: IARC; 2012.
- 2 World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Alcoholic drinks and the risk of cancer. Available at <https://www.wcrf.org/diet-and-cancer/>.
- 3 World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Alcoholic drinks and the risk of cancer. Available at <https://www.wcrf.org/diet-and-cancer/>.
- 4 World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Alcoholic drinks and the risk of cancer. Available at <https://www.wcrf.org/diet-and-cancer/>.
- 5 International Agency for Research on Cancer. Personal Habits and Indoor Combustions. Volume 100E. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Lyon: IARC, 2012.
- 6 Runggay H, Shield K, Charvat H, Ferrari P, Sornpaisarn B, Obort I, Islami F, Lemmens VEPP Rehm J, Soerjomataram I. Global burden of cancer in 2020 attributable to alcohol consumption: a population-based study. *Lancet Oncol* 2021; 22: 1071-1080. Available at [https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(21\)00279-5/fulltext#seccesstitle130](https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(21)00279-5/fulltext#seccesstitle130).
- 7 National Drug Research Institute, National alcohol indicators: Estimated alcohol-attributable deaths and hospitalisations in Australia, 2014 to 2015. National Drug Research Institute Bulletin 16. Available at <https://ndri.curtin.edu.au/ndri/media/documents/naip/naip016.pdf>.
- 8 Praud D, Rota M, Rehm J, et al. Cancer incidence and mortality attributable to alcohol consumption. *Int J Cancer* 2016; 138: 1380-87.
- 9 World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Alcoholic drinks and the risk of cancer. Available at <https://www.wcrf.org/diet-and-cancer/>.
- 10 World Cancer Research Fund, American Institute for Cancer Research. Food, nutrition, physical activity, and the prevention of cancer: a global perspective. Washington DC: AICR; 2007.
- 11 World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Body fatness and weight gain and the risk of cancer. Available at <https://www.wcrf.org/diet-and-cancer/>.