

SPIRITS – WHAT ARE THE RISKS FOR YOUNG PEOPLE?

Alcoholic products are usually grouped into three general classes:

- beer
- wine
- spirits

All alcoholic drinks contain ethanol, commonly known as alcohol.

A distilled beverage, liquor, or spirit is an alcoholic beverage containing ethanol that is produced by distillation. Distilling is the process of separating the alcohol from a water/alcohol solution, by heating and fermenting either grain, fruit, or vegetables.

Beer, cider and wine are not classed as spirits because they are ‘undistilled’ fermented beverages.

The term ‘spirit’ refers to a distilled beverage that contains no added sugar and has at least 20% alcohol by volume. Popular spirits in Australia include vodka, whisky, bourbon, rum, gin, rum, and tequila.

Here are a list of some of the most popular spirits and their source product:

Source	Distilled beverage
Grains:	
Barley	Whiskey
Corn	Whiskey, vodka
Wheat	Whiskey, vodka
Rice	Sake
Fruit:	
Grapes	Brandy, vermouth, cognac
Apples	Cider
Juniper berries	Gin
Vegetables:	
Potatoes	Vodka
Sugarcane/molasses	Rum
Agave	Tequila

Liqueurs are distilled beverages that contain added sugar and flavourings (popular products in Australia include Tia Maria and Kahlua). The difference between spirits and liqueurs is widely ignored; consequently all alcoholic beverages other than beer and wine are generally referred to as *spirits*.

Different alcohol products contain varying concentrations of alcohol. Some products have limitations on their alcohol content due to their source product. For example, most yeasts cannot reproduce when the concentration of alcohol is higher than about 18%, as a result the alcohol content of beer and wine is limited to that level – around 20%.

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Here are some of the most popular alcohol products in Australia and how much alcohol is contained in each:

Alcohol Product	Typical alcohol by volume
Low-alcohol beer	0%–1.2%
Cider	2%–8.5%
Beer	2%–12% (usually 4%–6%)
Premixed spirits (RTDs)	4%–17.5%
Wine	9%–18% (usually 12.5%–14.5%)
Liqueurs	15%–55%
Vodka	35%–50% (usually 40%)
Rum	37.5%–80%
Gin	40%–50%
Whisky	40%–50%
Absinthe	45%–90%

If we examine the alcoholic beverages that were popular with young people in the past, most young men drank beer while young women would drink wine-based products (e.g., ‘passion pop’). This appears to have changed dramatically with the most recent research suggesting that premixed spirits (often called ‘alcopops’) and spirits are increasing in popularity amongst young people.

Beer and wine-based products have a far lower alcohol content than spirits and, beer in particular, can be fairly ‘self-limiting’ for younger users as it can be difficult for them to drink too much before they start to feel the adverse effects.

Spirits are much cheaper than they once were and this makes them much more accessible to young people. So what are the risks for young people?

You can drink much more, much more quickly

It is important to remember that it takes much less vodka, rum or whisky to get drunk than beer or wine. It would only take minutes to drink two shots of vodka (60mls), whereas for most people it would take much longer to drink beer containing the equivalent amount of alcohol (two 285ml glasses – 570mls).

If a group of young people share a bottle of spirits between them in a session it is important that they understand that they are drinking the equivalent of 22 glasses of full strength beer, 22 cans of mid-strength beer, more than 2 litres of a cask of red wine, or more than three bottles of champagne. For many young people, if they tried to drink this amount of wine or beer they would find it difficult to do so quickly. Spirits are much easier to consume quickly but doing so can be extremely dangerous. Drink too quickly and by the time the negative effects are felt, too much has been consumed, and the drinker is then unable to modify their drinking in time to avoid feeling unwell.

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Effect on the brain

Research indicates that it is important to delay initiation to alcohol as long as possible as the developing brain is most vulnerable to the disruptive effects of alcohol. Adolescence is a period of our life when monumental changes are going on in our brains. In particular, the important areas of the brain involved in reasoning, planning, inhibition and emotion regulation are being developed.

We know that the more alcohol the brain is exposed to, the more severe the effect, particularly in relation to the hippocampus – the part of the brain involved in learning and memory. If the adolescent brain is regularly exposed to an alcoholic product that contains more alcohol, such as spirits, it is likely that this will lead to greater problems.

Any alcohol is going to be problematic. Drinking products with a higher alcohol content, such as spirits, at the same volume or higher, as those with lower levels of alcohol, such as beer or wine, is likely to increase the risk.

Effect on the liver

Male and female livers are inherently different, particularly during puberty when male livers are exposed to periodic bursts of growth hormone. The male liver is fully developed around 18 years, the female liver, much later at around 21 years.

Exposing a young person's undeveloped liver to alcohol is problematic as they are not able to process the alcohol as well as an adult, leading to the possibility of one of a range of liver conditions – fatty liver, hepatitis and cirrhosis. Once again, drinking high alcohol content products, such as spirits, is going to increase this risk.

Recent studies in Australia have shown that the risk of young people being admitted to hospital with alcohol-related liver disease has risen more than tenfold over five years. The most worrying increase in alcoholic cirrhosis has occurred in those aged 20 to 29, the majority of who would have begun drinking in their early teens.

Researchers have suggested that this increase could be due to the increase in the consumption of products with a higher alcohol content, such as spirits.