

Alcohol Hangover

The hangover is one of the most immediate and common unwanted consequences of alcohol consumption. Hangover describes the group of symptoms that may follow a night of excessive drinking. About 75% of people who drink to excess experience a hangover.

There are a number of commonly reported hangover symptoms:

- headaches and muscle pains or cramps
- gastrointestinal symptoms (loss of appetite, stomach ache, nausea, vomiting and diarrhea)
- fatigue and tremendous thirst
- elevated sympathetic tone (increased arterial pressure, rapid heart rate, palpitations, tremors and perspiration)
- deficits in the amount and quality of sleep
- increased anxiety in those prone to panic attacks
- sensory-perceptual symptoms (e.g., dizziness and a hyper-sensitivity to sound and light)
- cognitive and psychopathological symptoms (poor attention, concentration and short-term memory; deficits in visual-spatial and psychomotor skills; depression and irritability)

Hangover symptoms are related to blood alcohol concentration (BAC). The hangover develops approximately six to eight hours after alcohol intake, when the BAC is starting to decrease. It reaches maximum intensity when BAC reaches zero and tends to last for up to 24 hours after alcohol consumption.



Hangover Causes

The discomfort of a hangover may be a direct result of the liver metabolizing alcohol into acetaldehyde. Acetaldehyde in high concentrations causes, among other effects, reddening of the face, sweating, nausea, vomiting and tachycardia (accelerated heart rate).

Excessive drinking leads to dehydration, sleep disturbance, and low blood sugar, all of which cause other hangover symptoms.

- Dehydration produces the hangover symptoms of thirst, muscle pain and headaches.
- Studies have shown that one reason people feel so poorly the morning after excessive drinking is the sleep disturbance caused by the drinking. Alcohol makes one sleepy, but it also creates sleep disturbances.
- Low blood sugar affects brain function: for several hours after drinking too much, a person may feel weak, tired, dizzy, anxious and depressed, and have difficulty concentrating and seeing clearly.

Hangover Risk Factors

The primary risk factor associated with an alcohol hangover is, of course, excessive drinking. The incidence and severity of symptoms increases with the amount of alcohol consumed. However, the incidence and intensity of a hangover can vary from one person to the next, even if they drink exactly the same amount. Other risk factors are listed below.

Impurities

The likelihood and severity of hangover is increased when impurities are present. These may be by-products of fermentation, such as methanol, or additives, such as artificial sweeteners or flavours.

Psychological vulnerability

The incidence and intensity of hangover symptoms might also be influenced by psychosocial factors. One study found a correlation between symptom severity and feelings of guilt about drinking, neurosis, anger, depression, or negative life events.

Hangover Remedies

Headaches are reported by almost 90% of people suffering from a hangover, but care should be exercised with headache remedies. Acetaminophen (Tylenol®) is tolerated by those who occasionally drink too much, but it is strictly contraindicated for people with alcohol dependency who have been diagnosed with liver problems. For those prone to gastrointestinal problems, acetylsalicylic acid (Aspirin) and ibuprofen (Advil, Motrin) can worsen the irritating and inflammatory effects that alcohol already has on the stomach lining.

Cautions

A hangover is an indication of excessive drinking. Canada's Low-Risk Alcohol Drinking Guidelines (the LRDG) state that to reduce the risk of short-term injury or acute illness, women should have no more than three drinks on a single occasion and men not more than four on a single occasion.

For More Information

Alberta Health Services offers a wide range of addiction and mental health services. For individuals looking for help for themselves or for someone they care about, the addiction line is available 24 hours a day.

Addiction Helpline: 1-866-332-2322

For more detailed information on this topic and for other related information, go to the [Alcohol and Health Series](http://albertahealthservices.ca) at albertahealthservices.ca

